





## CATALOGUE

OF THE

## COLLECTION

OF

# BIRDS' EGGS

IN THE

## BRITISH MUSEUM.

## VOLUME I.

LONDON:
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1901.

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## CATALOGUE

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#### COLLECTION

OF

## BIRDS' EGGS

IN THE

# BRITISH MUSEUM (NATURAL HISTORY).

VOLUME I.

RATITÆ. CARINATÆ (TINAMIFORMES-LARIFORMES).

ВY

EUGENE W. OATES.

## LONDON: PRINTED BY ORDER OF THE TRUSTEES.

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## PREFACE.

The present volume has been written by Mr. Eugene W. Oates, who is well known to Ornithologists as the Editor of the second edition of Mr. Allan Hume's 'Nests and Eggs of Indian Birds,' and as the author of the earlier volumes of the 'Aves' in the 'Fauna of British India.' That he has performed his task conscientiously will be easily perceptible from a perusal of the following pages.

The Collection of Birds' Eggs in the British Museum now exceeds a total of 50,000 specimens. It was arranged and labelled some few years ago by Miss Emily Mary Sharpe, under the direction of the late Mr. Henry Seebohm and her father, Dr. Bowdler Sharpe. On that occasion Mr. Seebohm presented to the Trustees the whole of his collection of eggs of Palæarctic Birds, and an opportunity was thus offered of re-arranging the entire series in the Museum. At the same time the valuable donations of Mr. A. O. Hume, Messrs. Salvin and Godman, Mr. Berkeley James, and other friends of the Museum, were incorporated.

The original collection of Birds' eggs in the British Museum was rendered of little worth by the exposure of many precious specimens to the light of the public galleries, and by the mounting of the study collection on wooden tablets. Most of these specimens have perished, or have become so bleached as to be worthless for purposes of study.

A series of the eggs of British birds, illustrating even those of species included as 'rare' or 'accidental visitors' to the British vi Preface.

Islands, has been carefully arranged for exhibition in the Pavilion of the Bird-Gallery, and has proved of great assistance to students of the eggs of our native species of birds.

It is to be regretted that the whole of the first volume of this Catalogue was printed before the valuable bequest of eggs by the late Mr. Philip Crowley could be incorporated; but in the future volumes of the Catalogue the collection bequeathed by Mr. Crowley to the nation, one of the most valuable of the donations of recent years, will be duly chronicled.

1 have to acknowledge much assistance in editing the present volume from Dr. Bowdler Sharpe, the Assistant Keeper in charge of the Sub-Department of Vertebrata.

E. RAY LANKESTER,

Director.

British Museum (Natural History), February 25, 1901.

#### INTRODUCTION.

The only Catalogue of the Birds' Eggs in the Collection of the British Museum which has hitherto been published was prepared by the late Mr. G. R. Gray, and issued by the Trustees in 1852. It treats only of the eggs of British birds, but does not furnish a history of the specimens.

The present Catalogue deals with all the eggs contained in the Collection of the Museum with the exception of those in the Exhibition Galleries, which have often to be replaced. A convenient opportunity is thus afforded for reviewing the history of the entire collection from its earliest commencement. Many ancient eggs dating from the time of Montagu and Bullock are still preserved in the Museum, but they are bleached and faded almost beyond recognition, having been exposed to the light for many years in the Museum galleries.

An early donation seems to have been made in 1842 by Mr. D. W. Mitchell. It consisted of some eggs of British birds, chiefly from Cornwall. In 1844 Sir T. Wilson presented the Trustees with some specimens from Norway. In 1847 a small donation of seabirds' eggs from the Mauritius was made by Admiral Sir E. Belcher; and in the next year Dr. Rac contributed some specimens taken by him in Repulse Bay, Arctic America.

In 1850, Captain Stanley, the Commander of H.M.S. 'Rattle-snake,' presented to the Museum the eggs collected, during the voyage of that ship, by Dr. J. Macgillivray, the naturalist to the Expedition. All the specimens are of great interest and are well authenticated. In the same year the Trustees purchased a collection of eggs made in South Greenland by Governor Holböll.

In 1851, two collections passed into the Museum. One was acquired from Mr. A. D. Partlett, and the other was presented by Sir George Grey, then Governor of New Zealand.

In 1852, the Trustees received a small collection made by Dr. Lyall during the voyage of H.M.S. 'Acheron' in New Zealand waters; and also a considerable general collection, presented by Mr. H. F. Walter.

Two donations were made in 1853: one by Mr. E. L. Layard of the eggs of Ceylonese birds, and one by Sir Kenneth Loftus of eggs collected in Persia and Mesopotamia.

No more acquisitions appear to have been made for three years; but in 1856 a small collection from India was presented by Professor Oldham, and another from Australia by Sir D. Cooper.

In 1858, the Trustees were presented with a rather large collection of British birds' eggs by Mr. F. Bond; and in 1859 with one formed by Dr. Lyall during the voyage of H.M.S. 'Plumper' in the Northern Pacific Ocean. In the same year a collection made by Mr. T. Ayres in Natal was acquired.

A considerable interval again elapsed without any accessions to the Collection; but in 1863 Mr. J. K. Lord presented the specimens he had taken in the Rocky Mountains and British Columbia, while attached to the North American Boundary Commission, and in the same year a valuable collection was received from Mr. Bernard R. Ross, from the Saskatchewan and Mackenzie River Districts of Canada.

With the exception of a donation in 1869 from Mr. E. L. Layard of specimens collected in South Africa, no additions were made to the Collection till 1875, when Mr. S. O. Sahlin presented a series of Swedish eggs.

In 1876, a particularly fine collection of eggs, procured by the Rev. A. E. Eaton in Kerguelen Island during the 'Transit of Venus' Expedition, was presented to the Trustees by the Royal Society.

The accessions in 1878 consisted of a small number of specimens from Samoa and other islands of the Pacific Ocean, procured by the Rev. S. J. Whitmee; and the small collection made by Sir George Nares's Expedition to the Polar Sea in the 'Alert' and 'Discovery,' of which ships Col. H. W. Feilden and Mr. C. Hart were respectively the naturalists.

In 1879, Admiral A. H. Markham contributed a few specimens taken in Novaya Zemlya during his voyage in the 'Isbjorn.'

In 1880, the valuable collection formed during the Voyage of H.M.S. 'Challenger' was received by the Trustees; also a collection made by Sir Hugh Low in Borneo, as well as the eggs obtained by Dr. R. W. Coppinger during the cruise of H.M.S. 'Alert.'

In 1881, the acquisition of the late John Gould's collection of eggs of Australian and European birds was a notable event.

In 1884, the Museum received two small collections, one made by Mr. John Whitchead in Corsica, and the other by Mr. E. W. Oates in Burma.

In 1885, a particularly valuable series of eggs of Madagascan birds was acquired from the Rev. W. Deans Cowan. They are the only specimens from this island in the Museum, and their value cannot be over-estimated.

It was in 1885, and almost simultaneously, that the magnificent collections formed by Mr. Allan O. Hume, C.B., and Messrs. Osbert Salvin and F. DuCane Godman were presented to the Trustees. These collections were of such magnitude that some time necessarily elapsed before they were finally incorporated with the general collection and made available for study.

The Hume Collection consists almost entirely of the eggs of Indian birds. Mr. Hume seldom or never purchased a specimen, and the large collection brought together by him in the course of many years was the result of the willing co-operation of numerous friends resident in India and Burma. Every specimen in the collection may be said to have been properly authenticated by a competent naturalist; and the history of most of the clutches has been carefully recorded in Mr. Hume's 'Nests and Eggs of Indian Birds,' of which two editions have been published.

The Salvin-Godman Collection is of a more general character. As might be expected, it is rich in eggs of American birds. Not only did the above-named naturalists themselves collect in Central America, but they also purchased several important collections, chief among which should be mentioned that of Mr. T. K. Salmon, who formed a remarkably fine collection in the United States of Colombia. The Henshaw Collection of eggs of North-American birds was afterwards acquired by Dr. Godman; and the Smithsonian Institution appears to have been ever ready to present specimens to these two well-known naturalists. The large collection made by Salvin in Algeria, upwards of forty years ago, is most valuable, not only on account of the rarity of many of the specimens but for the absolute authenticity of their identification. The eggs of European birds are well represented; and a small number of Indian specimens were received from Mr. E. L. Layard (Ceylon) and Capt. R. C. Beavan (Bengal).

In 1887, a small but valuable collection of eggs from Norfolk Island was presented by Dr. W. M. Crowfoot.

In 1888, two small donations were received: one from Lieut.-Col.

Willoughby Verner of eggs obtained by him in the Soudan; the other from the Royal Society, consisting of the specimens taken on the island of Fernando Noronha by Mr. H. N. Ridley.

In 1890 the bequest of Dr. R. McCormick, consisting chiefly of sea-birds' eggs obtained during his voyages in the 'Erebus' and 'Terror,' was received by the Trustees. Also a collection made by Mr. W. D. Cumming in the Persian Gulf, and a few specimens brought by Mr. St. George Littledale from Central Asia.

Considerable additions were made in 1891. Foremost among these was the donation by Mr. Howard Saunders of his well-known series of eggs of Gulls and Terns. Professor George Dawson's collection, formed while he was engaged on the North American Boundary Commission, was of considerable interest. The following small contributions were also made:—A collection made by Mr. J. J. Lister in the islands of the Pacific Ocean; one made by Captain Collinson, Commander of H.M.S. 'Enterprise,' in Arctic America; and, lastly, some eggs taken in North-west Australia by Mr. J. J. Walker, during the voyage of H.M.S. 'Penguin,' presented by the Admiralty.

In 1893, Mr. F. A. Philbrick, Q.C., presented a collection of eggs of Australian birds formed by his son, mostly in Gippsland, Victoria; and Sir W. M. Conway gave some specimens from the Himalayas.

It was in 1893 that the late Henry Seebohm presented his fine collection of eggs to the Trustees. This valuable gift was brought to the Museum in instalments, and Seebohm was engaged for two years, with the assistance of Miss Emily Sharpe, in arranging and incorporating his specimens with the general collection of the Museum. In fact, he undertook to rearrange the whole series of eggs in accordance with the 'Catalogue of Birds,' which was then approaching completion, and to incorporate the Hume, the Salvin-Godman, and some minor collections together. This task was fortunately completed before his death, and he left the bulk of the collection arranged in most methodical order, with the name of each species and the history of each clutch of eggs carefully recorded, not only in the cabinets but also in a Catalogue which occupies ten volumes of manuscript. The eggs of the Passeriformes were arranged by Miss Emily Sharpe, under her father's direction. Seebohm's labours, as may be imagined, have greatly facilitated the writing of the present Catalogue.

Seebohm's Collection was composed almost entirely of the eggs of Palæarctic species of birds. Not only was he a most energetic traveller and successful collector himself in many countries of Europe and in Siberia, but he was in constant communication with many well-known naturalists on the Continent. He also acquired some reliable collections, the most noticeable of which was the excellent collection of British birds' eggs got together by that sterling naturalist, the late Edward Hargitt, R.I.

In 1894, the Museum received a small collection made by Mr. O. V. Aplin in Uruguay, and another, presented by Mr. S. Butcher, of specimens taken on the Arabian Coast.

In 1895, Colonel J. W. Yerbury presented some birds' eggs obtained by him near Aden, and Mr. Alexander Fry a series from Rio de Janeiro.

The accessions in 1896 and 1897 consisted of a few eggs taken by Mr. A. W. Anthony on the Revillagegido islands and the islands of the Gulf of California, and presented by him. With the purchase of the Steere collection of Philippine birds, the Trustees also acquired an interesting series of eggs.

No less than five collections were received in 1898. First in importance was the fine series of eggs of Chilian birds bequeathed to the Trustees by Mr. H. Berkeley James. Almost equally important was the one formed by Mr. A. H. Holland in the Argentine Republic, and purchased by the Museum. The other collections, though small, were of great interest. Sir John Murray presented the eggs taken by Dr. C. W. Andrews on Christmas Island, in the Indian Ocean; from Mr. John Whitehead were purchased the specimens obtained by him in the Philippine Islands; and Captain G. E. H. Barrett-Hamilton presented the birds' eggs collected by him in the islands of Bering's Straits, in the Northern Pacific.

In 1899 the acquisitions were small but of great interest. A set of eggs collected by the Webster-Harris Expedition to the Galapagos Islands was added to the Collection, as well as a small number of authenticated specimens from Costa Rica, collected by Mr. C. F. Underwood, while Dr. Cuthbert Christy presented some interesting eggs collected by him on the Niger.

In 1900 a large contribution of the eggs of North-American birds, collected by Mr. W. E. D. Scott, was received in exchange from the Princeton University, New Jersey; a small collection of Australian eggs was presented by Mr. Donald Mackintosh; several eggs were received from Mr. C. A. Barnard, a well-known collector in New Guinea and Northern Australia; Mr. E. S. Moulden of Adelaide also presented some interesting specimens; and a few eggs, taken by Mr. A. B. Percival in British Central Africa, were also purchased.

Since the commencement of 1901 a very fine collection of the eggs of Chinese birds has been presented by Mr. C. B. Rickett. Sir George Newnes has also given to the Museum a first set of the specimens brought back by the 'Southern Cross' Expedition to the Antarctic Ocean. This selection comprises the eggs of three species of sea-birds not previously represented in the Museum.

In addition to the above, it will be seen from the following pages that presents of specimens have been received from many naturalists. Among these may be mentioned the Hon. C. Baring, the late A. H. Everett, Colonel H. W. Feilden, Mr. W. R. Ogilvic Grant, Dr. A. Günther, Mr. Charles Hose, Colonel L. H. Irby, Mr. F. G. Jackson, Mr. F. J. Jackson, C.B., Sir H. H. Johnston, K.C.B., the late Lord Lilford, the late Sir Henry Peek, Captain G. Savile Reid, Dr. P. L. Sclater, Dr. R. Bowdler Sharpe, and Mr. R. J. Ussher. Many valuable eggs, laid in confinement, have been presented from time to time by the Zoological Society of London.

In this Catalogue, the arrangement and nomenclature of Dr. Bowdler Sharpe's 'Hand-list of the Genera and Species of Birds' have been adopted. This 'Hand-list' and the 'Catalogue of the Birds in the British Museum' have been invariably quoted throughout the present work. The other references have been selected with the view to present as complete a history of the eggs and nesting-habits as possible. Good figures of the eggs are quoted, and especial reference has been made to those authors whose reports, or papers in periodical literature, treat of the particular specimens in the Collection with which their names are associated.

The birds included in this volume embrace the Ratiter and that portion of the Carinata extending in the 'Hand-list' from the Tinamiformes to the Lariformes. The total number of species is 520 and of specimens 12,156, distributed in the following manner:—

#### RATITÆ.

	No. of species.	No. of specimens.
Rheiformes	2	16
Struthioniformes	4	15
Casuariiformes	7	32
Dinornithiformes	1	4
Æpyornithiformes	1	4
Apterygiformes	1	2
CARINATA	Ε.	
Tinamiformes	17	109
Galliformes	137	2310
Hemipodii		262
Pteroclidiformes	9	243
Columbiformes	87	752
Opisthocomiformes	1	7
Ralliformes	54	1026
Podicipedidiformes	15	313
Colymbiformes	4	124
Sphenisciformes	10	125
Procellariiformes	48	445
Alciformes	16	926
Lariformes	92	5441
	520	12,156

It appears, therefore, that the British Museum Collection contains specimens of the eggs of about one-third of the total number of the living or recently-extinct birds belonging to the above mentioned Orders, as enumerated in the 'Hand-list.'

With few exceptions, the eggs now illustrated have not been figured before. It only remains to add that the measurements of the specimens throughout this Catalogue are invariably in English inches.

The symbols employed in the present volume are the same as those in the 'Catalogue of Birds.' [P.] means "Presented by." [C.] "Collected by." [E.] "Received in exchange."

EUGENE W. OATES.

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Order STRUTHIONIFORMES.	Apteryx, Shaw
Family Struthionidæ.  Struthio, Linn	Sub-Class CARINATÆ.  Order TINAMIFORMES.
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## Class AVES.

## Sub-Class RATITÆ.

#### Order RHEIFORMES.

## Family RHEIDÆ.

Genus RHEA. Lath.

[Cf. Nathusius, J. f. O. 1896, p. 257.]

The eggs of the Rheas are elliptical in form, and in some instances The shell is very strong, smooth and closely pitted with pores. The majority are glossy; a few are entirely without gloss.

## Rhea americana (Linn.).

Rhea americana, Thien. Fortpflanz. ges. Vöy. tab. ii. fig. 1 (1845-54); Sclater, P. Z. S. 1863, p. 234; Hudson, P. Z. S. 1872, p. 535; Gibson, This, 1885, p. 283; Claraz, P. Z. S. 1885, p. 324; Scl. & Huds.Argent. Orn. ii. p. 216 (1889); Holland, Ibis, 1892, p. 214; Schalow, J. f. O. 1894, p. 12; Salvadori, Cat. Birds B. M. xxvii. p. 578 (1895); Sharpe, Hand-l. i. p. 1 (1899).

The eggs of the Common Rhea in the Collection vary in colour between parchment-white and pale yellow. They also vary in size very considerably, and it is probable that those of the first year are much smaller than those subsequently laid. Full-sized eggs measure from 5.3 to 6 in length and from 3.55 to 3.95 in breadth. A small specimen collected by Mr. A. H. Holland measures only 3.15 by 2.45.

- 1. Buenos Ayres.
- Buenos Ayres.
- Argentine Republic.
   Argentine Republic, Oct.
   Rio Grande do Sul.
- Laid in confinement (Zool. Gardens, London).
- Lilford Aviaties. VOL. L.

C. J. Jessop, Esq. [P.].

W. Parish, Esq. [P.]. W. Moncreiffe, Esq. [P.]. A. H. Holland, Esq. [C.].

Dr. von Ihering [P.]. Salvin-Godman Coll.

Lord Lilford [P.].

#### Rhea darwini, Gould.

Rhea darwini, Thien. Fortpflanz. ges. Vög. tab. ii. fig. 2 (1845-54); Hudson, P.Z. S. 1872, p. 535; Claraz, P.Z. S. 1885, p. 324; Sel. & Huds. Argent. Orn. ii. p. 219 (1889); Schalow, J. f. O. 1894, p. 11; Salvadori, Cat. Birds B. M. xxvii. p. 582 (1895); Lane, Ibis, 1897, p. 316; Sharpe, Hand-l. i. p. 1 (1899).

When fresh, the eggs of Darwin's Rhea are, according to Mr. Hudson, of a deep, rich green colour. Some specimens in the Collection have faded to a parchment-white; others to a pale buff, dull green or yellow. They measure from 5.2 to 5.4 in length, and from 3.4 to 3.7 in breadth.

- 1. South America.
- 2. South America.
- Argentine Republic.
   Patagonia.
- 1. Patagonia.

Georges Claraz, Esq. [P.]. Sir W. Burnett [P.] R. Lydekker, Esq. [P.] W. Moncreiffe, Esq. [P.]. Gould Coll.

Rhea nana, described by Mr. Lydekker (Knowledge, xvii. 1894, p. 265; Revista del Museo de la Plata, vi. 1894, p. 103, with fig. of egg; P. Z. S. 1894, p. 654; Salvad. Cat. Birds B. M. xxvii. p. 578, 1895), is at present known only from an egg. A cast of this is in the British Museum Collection. It is a perfect ellipse in form and measures 3.4 by 2.65. A cast of a somewhat similar egg, measuring 3.65 by 2.7, has been presented to the British Museum by Dr. Berg. It will be noticed that both these examples are larger than the small egg of R. americana collected by Mr. Holland, the measurements of which are given above. The validity of R. nana as a species, viewed in the light of the small size of its egg, would therefore appear to be doubtful.

## Order STRUTHIONIFORMES.

## Family STRUTHIONIDÆ.

#### Genus STRUTHIO, Linn.

The eggs of the Ostriches are spheroidal in form. The shell is extremely strong, very smooth, and highly glossy.

Four species of Ostriches are known, but their geographical range has not yet been accurately ascertained.

The eggs of S. camelus may be recognized by the absence of punctures or pores on the shell, but those of the remaining three species cannot be discriminated one from the other.

STRUTHIO.

3

#### Struthio camelus, Linn.

Struthio camelus, Thien. Fortpflanz. ges. Vög. tab. iii. (1845-54); Hardy, Compt. Rend. xlvi. p. 1272 (1858); Tristram, Ibis, 1860, p. 72; Sclater, P. Z. S. 1863, p. 233; Nathusius, J. f. O. 1885, p. 165, taf. 2. fig. 3; Schalow, J. f. O. 1894, p. 5; Salvadori, Cat. Birds B. M. xxvii. p. 572 (1895); Sharpe, Hand-l. i. p. 2 (1899).

The few eggs of the Northern Ostrich in the Collection vary in colour. One is of a parchment-white, and two are of a pale greenish yellow. A fourth is of a dead white, without any gloss. They may be distinguished by their extreme smoothness, and by the absence of those pits or pores which are so characteristic of the eggs of the other species of Ostriches. There are, it is true, a few minute pores, but they can only be detected when the shell is closely scrutinized, not otherwise. Four eggs measure respectively: 6 by 5; 5.7 by 4.75; 6 by 4.9; 6 by 5.

1. North Africa.

Old Collection.

1. North Africa.

Salvin-Godman Coll.

2. Jebba, Upper Niger River, 23rd Jan. Capt. G. Fanshawe Abadie [P.].

#### Struthio molybdophanes, Reichen.

Struthio molybdophanes, Henke, Zeitschr. ges. Orn. 1884, p. 219, taf. xii.; Nathusius, J. f. O. 1885, p. 165, taf. 2. fig. 2; Schalow, J. f. O. 1894, p. 7; Salvadori, Cat. Birds B. M. xxvii. p. 574 (1895); Sharpe, Hand-l. i. p. 2 (1899).

The three eggs of the Somali-land Ostrich in the Collection are of a parchment-white or dull yellowish, plentifully covered with deep pores or pits, which are of a deep purple colour, very distinct, and of a large size. They measure respectively: 5.9 by 4.85; 5.9 by 4.65; 5.9 by 4.8.

1. Somali-land.
2 Somali-land.

Old Collection. Purchased.

## Struthio australis, Gurney.

Struthio australis, Henke, Zeitschr. ges. Orn. 1884, p. 220, taf. xii.; Nathusius, J. f. O. 1885, p. 165, taf. 2. fig. 1, taf. 3. figs. 4–8; Layard, Birds S. Africa, Sharpe's ed. p. 791 (1875–84); Schalow, J. f. O. 1894, p. 9; Salvadori, Cat. Birds B. M. xxvii. p. 575 (1895); Sharpe, Hand-l. i. p. 2 (1899).

The eggs of the Cape Ostrich cannot, with certainty, be separated from those of S. molybdophanes nor from those of the next species. Judging, however, from the few examples available for examination, the eggs of the present species would appear to have the pores or pits on the shell finer and smaller and of a somewhat paler colour. They vary in size from 5.7 to 6.3 in length, and from 4.8 to 5 in breadth.

2. South Africa.

1. Cape of Good Hope.

L. Cape Colony.

Old Collection.

Salvin-Godman Coll. P. L. Sclater, Esq. P.7.

R \*

#### Struthio masaicus, O. Neumann.

Struthio camelus, var. meridionalis, Scl. List Vert. An. 1862, p. 71\*.
Struthio masaicus, O. Neumann, J. f. O. 1898, p. 243; Sharpe, Hand-l.
i. p. 2 (1899).

The eggs of the Masai-land Ostrich do not appear to differ from those of S. molybelophanes. The pores or pits are equally numerous and of the same deep purple colour, except in one specimen, where these are only slightly darker than the shell itself. The eggs vary in size from 5.6 to 6.1 in length, and from 4.8 to 5 in breadth.

Masai-land.
 Kilimanjaro District (Holmwood).
 Kilimanjaro District (H. H. Johnston).
 Kilimanjaro District (H. H. Johnston).
 L. Selater, Esq. [P.].

#### Order CASUARIIFORMES.

The eggs of the Emus and Cassowaries are typically biconical in

form, occasionally elliptical and rarely oval.

The shell is extremely strong, and is covered with a close and intricate network of raised lines and granulations which covers about two-thirds of its surface. The shell itself is dull, but the raised lines and granulations are extremely glossy.

Some specimens laid in confinement are perfectly smooth, and

entirely want even traces of the raised lines and granulations.

Mr. E. Hartert informs me that he believes the eggs of all the Cassowaries, when first laid, are of a bright green colour.

## Family DROMÆIDÆ.

Genus DROMÆUS, Vieill.

## Dromæus novæ-hollandiæ (Lath.).

('asuarius novæ-hollandiæ, Thien. Fortpflanz. ges. Vög. tab. i. fig. 2 (1845-54).

Dromæus novæ-hollandiæ, Sclater, P. Z. S. 1863, p. 234; Gould, Handb. Birds Austr. ii. p. 200 (1865); Campbell, N. & E. Austr. Birds, p. 52 (1883); North, N. & E. Austr. Birds, p. 52 (1889); Schalow, J. f. O. 1894, p. 15; Salvadori, Cat. Birds B. M. xxvii. p. 586 (1895); Sharpe, Hand-l. i. p. 2 (1899).

The eggs of the Emu present the general appearance of being of a very dark greenish-brown, dark purplish-brown, deep clive-brown or brownish-buff colour. On a close examination, however, it will be observed that the shell itself where visible is of a pale buff or dingy green colour, and that its dark aspect is due entirely to the colour of the raised lines and granulations.

<sup>\*</sup> The Hon. Walter Rothschild informs me that he believes S. meridionalis of Sclater to be identical with S. masaicus of Neumann.

One example in the Collection, laid in confinement, is quite smooth and uniformly of a clear bluish-green colour.

The eggs measure from 4.9 to 6 in length, and from 3.15 to 3.8 in breadth

Of uncertain origin.

Swan River, W. Australia.

Australia (Slate).

Australia.

١. S. Australia.

Tasmania.

Tasmania.

3. Laid in confinement.

Laid in confinement.

1. Laid in continement

Old Collection.

Government of Western Australia [P.].

Salvin-Godman Coll.

Donald MacIntosh, Esq. [P.].

Sir T. Davenport [P.].

Dr. Milligen [P.].

R. J. Mercer, Esq. [P.]. Sir E. G. Loder [P.].

W. G. Lettson, Esq. [P.]. Sir H. Peek [P.].

## Family CASUARIIDÆ.

#### Genus CASUARIUS, Briss.

#### Casuarius casuarius (Linn.).

Casuarius emeu, Thien. Fortpflanz. ges. Vög. p. 2, tab. i. fig. I (1845-54). Casuarius galeatus, Sclater, P. Z. S. 1863, p. 234; Schalow, J. f. O. 1894, p. 18; Salvadori, Cat. Birds B. M. xxvii. p. 592 (1895). Casuarius beccarii, Pelzeln, Ibis, 1881, p. 401.

Casuarius casuarius, Sharpe, Hand-l. i. p. 3 (1899).

The sole egg of the Common Cassowary in the Collection is perfectly smooth, fairly glossy, and of a rather bright green colour. The shell is a good deal disintegrated towards the larger end, and portions of an inner shell, of a pale yellowish-green colour, are This specimen was laid in captivity, and is probably abnormal. It measures 5.7 by 3.35.

Von Pelzeln (l. c.) describes an egg of this bird as being "pale olive-green, with tubercles of a vivid green colour equally distributed over the whole surface."

1. Laid in confinement (Zool, Gardens, Salvin-Godman Coll. London).

#### Casuarius australis, Wall.

Casuarius australis, Gould, Handb. Birds Austr. ii. p. 206 (1865); North, N. & E. Austr. Birds, p. 294, pl. xv. (1889); Schalow, J. f. O. 1894, p. 24; Salvadori, Cat. Birds B. M. xxvii. p. 594 (1895); Sharpe, Hand-l. i. p. 3 (1899).

The shell of the egg of the Australian Cassowary is of a buff In two of the specimens in the Collection, the reticulations are of a slightly darker shade of buff than the shell: in two others, they are pale green; and in a fifth, very dark green. They measure from 5.1 to 5.65 in length, and from 3.3 to 3.6 in breadth.

Old Collection. 2. Of uncertain origin. Old Collection. Northern Queensland. 2.

Salvin-Godman Coll Rockingham Bay (Cockerell).

#### Casuarius beccarii, Scl.

Casuarius beccarii, Salvad, Cat. Birds B. M. xxvii. p. 596 (1895); Sharpe. Hand-l. i. p. 3 (1899).

The sole egg of Beecari's Cassowary in the Collection is bluntly biconical. It is of a buff colour, reticulated with dull green. The reticulations and the visible portions of the real shell occupy about the same space. It measures 5.5 by 3.85.

Aru Islands.

The Trustees of the Christy Museum [P.].

#### Casuarius uniappendiculatus. Blyth.

Casuarius uniappendiculatus, Scl. P. Z. S. 1877, p. 419; Meyer, Abh. Mus. Dresd. no. 3, taf. 2 (1893); Schalow, J. f. O. 1894, p. 23; Salvadori, Cat. Birds B. M. xxvii, p. 597 (1895); Sharpe, Hand-l. p. 4 (1899).

The two eggs of the One-wattled Cassowary in the Collection laid in the Amsterdam Gardens have the ground of a pale green: one is reticulated with dark green; the other is covered with glistening raised dark green spots, resembling beads. The specimen from Salawati has the ground greenish buff, and the reticulations of a dull green colour. These three eggs measure respectively: 5:4 by 3:45; 5.3 by 3.35; 4.7 by 3.5.

1. Laid in confinement (Zool. Gardens, Amsterdam).

M. Frank, Esq. [C.].

Laid in confinement (Zool, Gardens, Amsterdam) (Westermann).

Salvin-Godman Coll.

Salawati.

Dr. Kaup [P.].

## Casuarius papuanus, Schleg.

Casuarius papuanus, Schalow, J. f. O. 1894, p. 20; Salvadori, Cat. Birds B. M. xxvii. p. 599 (1895); Sharpe, Hand-l. i. p. 4 (1899).

The two eggs of Westermann's Cassowary laid in the Antwerp Gardens are of a pale greenish-buff colour, reticulated with very dark green. The one found in Northern New Guinea has the ground of a pale buff colour, and the reticulations are dull bluish green. They measure respectively: 5.95 by 3.65; 5.25 by 3.4; 5·1 by 3·3.

Laid in confinement (Zool. Gardens, P. L. Selater, Esq. [P.]. Antwerp).

 Northern New Guinea. Charles Hose, Esq. [P.].

#### Casuarius bennetti, Gould.

Casuarius bennetti, J. E. Gray, P. Z. S. 1858, p. 271, Aves, pl. exliv.;
Bartlett, P. Z. S. 1860, p. 205, Aves, pl. elxii.; Gould, Handb. Birds Austr. ii. p. 561 (1865); Schalow, J. f. O. 1894, p. 20; Salvadurı, Cat. Birds B. M. xxvii. p. 601 (1895); Sharpe, Hand-l. i. p. 4 (1899).

The shell of the eggs of Bennett's Cassowary is of a pale buff or grey colour. The raised lines and granulations on the shell vary in tint. In one example they are of a pale dull greenish; in another they are extremely coarse, prominent, and of a greenish-brown colour. In two others the lines are very feebly developed and they are pale greenish-buff. Four eggs measure respectively: 5.55 by 3.5; 5.05 by 3.4; 5.75 by 3.55; 5.4 by 3.55.

2. New Britain (Stevens).

1. New Britain (G. Bennett).

1. New Britain.

Old Collection.

Salvin-Godman Coll.

Admiral A. H. Hoskins [P.].

#### Order DINORNITHIFORMES.

## Family DINORNITHIDÆ.

#### Genus DINORNIS, Owen.

Dinornis, Lydekker, Cat. Fossil Birds B. M. pp. 222, 349 (1891); Sharpe, Hand-l. i. p. 4 (1899).

The eggs of the extinct Moas of New Zealand are found in caves and in the burial-places of the Maoris. The specimens contained in the National Collection \* are imperfect, but the fragments of three have been restored in plaster, the contour of each being determined by the curvature of the fractured pieces. As thus restored, the eggs are nearly perfect ellipses, and three specimens measure respectively: 7.25 by 6: 7.75 by 5.25; 8.1 by 5.9.

The shell is strong, being about one-twelfth of an inch in thickness. In colour the existing remains are of a pale grey. Owen thus describes the shell:—"The shell in Dinornis is not only absolutely thinner, but relatively much thinner than in the Ostrich, and, à fortiori, than in the Æpyornis. The air-pores also have a different form, being linear, not rounded; and the external surface is smoother. In the smoothness and thinness of the shell, the egg of Dinornis resembles that of Aptery."."

<sup>\*</sup> These are exhibited in the Geological Galleries.

The structure of the shell has been well investigated by W. v. Nathusius, and the results published in the 'Zeitschrift für wissenschaftliche Zoologie,' vol. xxi. p. 330, pls. xxv. & xxvi. (1871).

Sir Richard Owen has figured two eggs of these birds in his 'Memoirs on the Extinct Wingless Birds of New Zealand,' p. 317 (1879). Plate cxv. represents an example which he assigns to D. crassus: this is in the B.M. Collection, bearing the registered number A. 222. Plate cxvii. represents an egg which is referred to D. ingens.

1. New Zealand (A. 222). Restored in plaster.

New Zealand ( $\hat{A}$ , 222 a). 1. Restored in plaster. New Zealand (A. 222 b).

Restored in plaster.

Several fragments (21807).

P Mantell Coll.

9 Mantell Coll

? Mantell Coll.

Mantell Coll.

## Order ÆPYORNITHIFORMES.

## Family ÆPYORNITHIDÆ.

#### Genus ÆPYORNIS, Is. Geoff.

Æpyornis, Lydekker, Cat. Fossil Birds B. M. pp. 213, 214 (1891); Sharpe, Hand-l. i. p. 6 (1899).

The eggs of Æpyornis are found in recent alluvial deposits, near the surface, in the south of Madagascar, especially in the neighbourhood of Cape St. Marie. They are in an excellent state of preservation, and usually quite intact.

W.v. Nathusius in the 'Zeitschrift für wissenschaftliche Zoologie,' vol. xxi. p. 330, pls. xxv. & xxvi., has fully dealt with the structure

of the shell of the egg of Epyornis.

Professor G. Capellini has written an elaborate memoir on the egg in the 'Memorie della R. Accademia delle Scienze dell' Istituto di Bologna, series iv. vol. x. p. 16 (1889).

Mr. G. Dawson Rowley has published an interesting essay on the egg of Epyornis in the 'Proceedings' of the Zoological Society of London for 1867, p. 892.

Other papers on the same subject will be found fully noticed in

Prof. Capellini's memoir above mentioned.

The shell is about one-tenth of an inch in thickness. Portions of its surface are generally extremely rough, resembling the texture of a coarse file, while other portions have been worn quite smooth, like the shell of an Ostrich's egg. The eggs are of a pale vellowish or buff colour. In shape they are true ellipses.

The specimens in the British Museum Collection are probably all referable to £. maximus. No. 41847 measures 13:1 by 9:5; it is fractured. No. 41848 and an egg without number, both intact and perfect in all respects, measure respectively: 11 by 8:25 and 11:25 by 8:25. A cast, No. A. 83, the original of which is preserved in the Paris Museum, measures 12:25 by 9:25.

1. Madagascar. Fragments only (A. 18)\*. J. Porter, Esq. [P.].

Madagascar (41847) \*.
 Madagascar (41848) \*.

Madagascar (41848) \*. Purch

1. Madagascar (without number) †.

J. Porter, Esq. [P.] Purchased.

Purchased. Purchased.

## Order APTERYGIFORMES.

## Family APTERYGIDÆ.

## Genus APTERYX, Shaw.

## Apteryx mantelli, Bartl.

Apteryx mantelli, Sclater, P. Z. S. 1859, p. 350; 1860, p. 194; 1863, p. 234; Salvadori, Cat. Birds B. M. xxvii. p. 607 (1895); Sharpe, Hand-l. i. p. 7 (1899).

Apteryx bulleri, Buller, Birds New Zeal. 2nd ed. ii. p. 308 (1888).

The eggs of Mantell's Apteryx in the Collection are of an elongated elliptical form, the two ends being closely alike. The shell is strong, smooth and compact, but exhibits no gloss. They are of a dull white or a very pale yellowish colour.

They are enormously large in proportion to the size of the bird. The two examples in the Collection measure respectively:

4.75 by 3.02; 4.7 by 2.9.

1. Laid in confinement (Zool. Gardens, London). Salvin-Godman Coll.

 Laid in confinement (Zool. Gardens, London).

Zool. Society.

\* These are exhibited in the Geological Galleries.

<sup>†</sup> This is exhibited in the Zoological Galleries, as is also the cast above mentioned.

## Sub-Class CARINATÆ.

#### Order TINAMIFORMES.

The eggs of the Tinamous have a firm and compact shell and are extremely smooth and glossy. Of so beautiful a texture are they, that the shell may be compared to polished metal or the finest glazed porcelain. The colour varies in the different genera, but the eggs of the birds of the same genus are generally alike.

The shape also varies. Some examples are almost spherical; others are elliptical; and others again, but quite a minority, are

biconical or oval.

## Family TINAMIDÆ.

## Sub-Family TINAMINÆ.

#### Genus TINAMUS, Hermann.

The eggs of the Tinamous of this genus are spheroidal and of a blue colour.

## Tinamus robustus, Scl.

(Plate I. fig. 1.)

Tinamus robustus, Salvin, Ibis, 1861, p. 355; Salvadori, Cat. Birds B. M. xxvii. p. 500 (1895); Sharpe, Hand-l. i. p. 8 (1899).

The eggs of the Great Mexican Tinamon vary from 2.25 to 2.35 in length, and from 1.87 to 2 in breadth.

6. Guatemala. Sa 4. British Honduras (F. Elancaneaux). Sa

Salvin-Godman Coll.

Salvin-Godman Coll.

## Tinamus major (Gm.).

Crypturus brasiliensis, Thien. Fortpftanz. ges. Vög. p. 23, tab. v. fig. 2 (1845-54).

Tinamus major, Salvin, Ihis, 1861, p. 356; Salvadori, Cat. Birds B. M. xxvii. p. 502 (1895); Sharpe, Hand-l. i. p. 8 (1899).

The single egg of the Great Tinamou in the Collection measures 2.3 by 1.9.

Brazil (Brandt).

Old Collection.

#### Tinamus ruficeps, Scl. & Salv.

Tinamus ruficeps, Scl. & Salv. P. Z. S. 1879, p. 548; Salvadori, Cat. Birds B. M. xxvii. p. 506 (1895); Sharpe, Hand-l. i. p. 8 (1899).

The eggs of the Rufous-crowned Tinamou vary from 2·15 to 2·35 in length, and from 1·72 to 1·95 in breadth.

6. Remedios, Antioquia, U.S. of Scolombia (T. K. Salmon).

Salvin-Godman Coll.

#### Genus **NOTHOCERCUS**, Bp.

The eggs of the Tinamous of this genus are of a darker blue than those of the species of *Tinamus*. In shape they are either true ellipses, or ovals with one end very slightly compressed.

## Nothocercus frantzii (Lawr.).

Nothocercus frantzii, Salvadori, Cat. Birds B. M. xxvii. p. 512 (1895); Sharpe, Hand-l. i. p. 9 (1899).

The two eggs of Frantz's Tinamou in the Collection measure respectively: 3 by 2.05; 3.1 by 2.05.

2. Of uncertain origin.

Old Collection.

#### Nothocercus intercedens, Salvad.

Nothocercus bonapartii, Scl. & Salv. P. Z. S. 1879, p. 548. Nothocercus intercedens, Salvadori, Cat. Birds B. M. xxvii. p. 513 (1895); Sharpe, Hand-l. i. p. 9 (1899).

The two eggs of Salvadori's Tinamou in the Collection are smaller and of a darker blue than those of *N. frantzii*. They measure respectively: 2.8 by 2; 2.9 by 2.

2. Frontino, Antioquia, U.S. of Colombia (T. K. Salmon).

Salvin-Godman Coll.

## Genus CRYPTURUS, Illig.

In this genus the eggs are short regular ellipses, with a tendency to be spheroidal. The colour varies from a pinkish stone-colour to a clay-colour.

## Crypturus griseiventris, Salvad.

Crypturus griseiventris, Salvadori, Cat. Birds B. M. xxvii. p. 521 (1895); Sharpe, Hand-l. i. p. 9 (1899).

The single egg of the Grey-bellied Tinamou in the Collection is of a pinkish stone-colour, and measures 1.82 by 1.4.

 Santarem, R. Amazon (H. Wickham).

#### Crypturus pileatus (Bodd.).

Crypturus sovi, *Thien. Fortpflanz. ges. Vög.* p. 25, tab. v. fig. 9 (1845–54). Tinamus meserythrus, *Salvin, Ibis*, 1861, p. 356.

Crypturus pileatus, Scl. & Salv. P Z. S. 1879, p. 548; Salvadori, Cat. Birds B. M. xxvii, p. 522 (1895); Sharpe, Hand-l. i. p. 9 (1899).

The eggs of the Little Tinamou are of a reddish clay-colour; those in the Collection measure respectively: 1.6 by 1.21; 1.64 by 1.3; 1.67 by 1.24.

Lion Hill, Panama (McLeannan).

Salvin-Godman Coll. Salvin-Godman Coll.

1. Choctum, Guatemala (O. Salvin). Remedios, Antioquia, U.S. of

Salvin-Godman Coll.

Colombia (T. K. Salmon).

## Crypturus cinnamomeus (Less.).

(Plate I. fig. 2.)

Tinamus sallæi, Nehrk. J. f. O. 1881, p. 69.

Crypturus cinnamomeus, Šalvadori, Cat. Birds B. M. xxvii. p. 541 (1895); Sharpe, Hand-l. i. p. 10 (1899).

The eggs of Salle's Tinamou in the Collection are of a pinkish stone-colour, and measure respectively: 1.85 by 1.43; 1.73 by 1.45; 1.7 by 1.43.

1. Yucatan (Gaumer). Of uncertain origin. Salvin-Godman Coll. Old Collection.

## Genus RHYNCHOTUS, Spix.

In this genus the eggs are normally biconical in shape, occasionally elliptical. They are of a reddish-purple or purplish-brown colour.

## Rhynchotus rufescens (Temm.).

Crypturus rufescens, Thien. Fortpflanz. ges. Vöy. p. 24, tab. v. fig. 5 (1845-54).

Rhynchotus rufescens, Bartlett, P. Z. S. 1868, p. 114, pl. xii. fig. 2; Hudson, P. Z. S. 1872, p. 546; Scl. & Huds. Argent. Orn. ii. p. 209 (1889); Salvadori, Cat. Birds B. M. xxvii. p. 548 (1895); Blaauw, Ibis, 1895, p. 487; Sharpe, Hand-l. i. p. 10 (1899).

The eggs of the Rufous Tinamou range from 2.3 to 2.6 in length, and from 1.57 to 1.8 in breadth.

Laid in confinement (Zool. Gardens, London).

Zool. Society.

Buenos Ayres.

10. Argentine Republic. 4. Argentine Republic, Nov.

W. H. Hudson, Esq. [P.]. D. A. Shennan, Esq. P. A. H. Holland, Esq. C. Salvin-Godman Coll.

1. Brazil (Christy).

#### Genus NOTHOPROCTA, Scl. & Salv.

The eggs of the Tinamous of this genus are biconical in shape. They are usually of a very dark purplish-brown or deep liver-colour. Some are paler and tinged with a reddish hue.

## Nothoprocta perdicaria (Kittl.).

(Plate I. fig. 3.)

Nothoprocta perdicaria, James, New List of Chilian Birds, p. 14 (1892); Salvadori, Cat. Birds B. M. xxvii, p. 553 (1895); Lane, Ibis, 1897, p. 314; Sharpe, Hand-l. i. p. 11 (1899).

The eggs of the Chilian Tinamon vary from 1.8 to 2.1 in length, and from 1.33 to 1.5 in breadth.

Central Chili, Sept.

5. Chili.

Of uncertain origin.
 Of uncertain origin.

1. Of uncertain origin (A. D. Bartlett).

Berkeley James Coll. Berkeley James Coll.

E. C. Reed, Esq. [P.]. H. F. Walker, Esq. [P.].

Capt. Kellett & Lieut. Wood [P.]. Salvin-Godman Coll.

## Nothoprocta curvirostris, Scl. & Salv.

Nothoprocta curvirostris, Salvadori, Cat. Birds B. M. xxvii. p. 556 (1895); Sharpe, Hand-l. i. p. 11 (1899).

The eggs of the Curved-bill Tinamou are much paler than those of N. perdicaria and have a decided reddish tinge. The two specimens in the Collection measure respectively:  $2\cdot13$  by  $1\cdot47$ ;  $2\cdot07$  by  $1\cdot47$ .

2. Pessucho, Ecuador, March (L. Fraser).

Salvin-Godman Coll.

## Genus NOTHURA, Wagler.

The eggs of the two species of *Nothura* represented in the Collection resemble those of *Nothoprocta perdicaria* very closely, being of a dark purplish-brown or deep liver-colour.

## Nothura maculosa (Temm.).

Crypturus maculosus, Thien. Fortpflanz. ges. Vög. p. 26, tab. v. fig. 11 (1845-54).

Nothura maculosa, Gibson, Ibis, 1880, p. 168; Scl. & Huds. Argent.
Orn. ii. p. 211 (1889); Holland, Ibis, 1892, p. 214; Aplin, Ibis, 1894, p. 214; Salvadori, Cat. Birds B. M. xxvii. p. 559 (1895); Sharpe, Hand-l. i. p. 11 (1899).

The eggs of the Spotted Tinamou vary from 1.55 to 1.85 in length, and from 1.15 to 1.35 in breadth.

3. Brazil.

Uruguay.
 Argentine Republic, Oct.

1. Of uncertain origin.

Salvin-Godman Coll.

O. V. Aplin, Esq. [P.]. A. H. Holland, Esq. [C.].

Old Collection.

#### Nothura darwini. Grau.

Nothura darwini, Sel. & Huds, P. Z. S. 1872, p. 547; iid. Argent. Orn. ii. p. 213 (1889); Salvadori, Cat. Birds B. M. xxvii p. 562 (1895); Sharpe, Hand-l. i, p. 11 (1899).

The single egg of Darwin's Tinamou in the Collection is an elongated ellipse, the two ends being precisely similar. In colour it is undistinguishable from the majority of the eggs of N. maculosa. It measures 2 by 1.25.

1. Uruguay.

A. K. MacKinnon, Esq. [P.].

## Sub-Family TINAMOTIDINÆ.

In this sub-family the eggs are usually of a regular elliptical form and always of a green colour.

#### Genus CALOPEZUS, Ridgev.

## Calopezus elegans (D'Orb. & Geoffr.). (Plate I. fig. 4.)

Eudromia elegans, Hudson, P. Z. S. 1872, p. 545.

Calodromus elegans, Sclater, P. Z. S. 1879, p. 311; id. Zool. 'Chall.' Exped, viii. p. 152 (1880); Scl. & Huds. Argent. Orn. ii. p. 214 (1889).

Calopezus elegans, Salvadori, Cat. Birds B. M. xxvii. p. 566 (1895); Sharpe, Hand-l. i. p. 12 (1899).

The eggs of the Martineta Tinamou vary in colour from pale vellowish-green to dark sage-green. They measure from 2 to 2.25 in length, and from 1.5 to 1.55 in breadth.

South Brazil (G. Hartlaub).

Salvin-Godman Coll. Salvin-Godman Coll.

1. South Brazil (H. Burmeister). Argentine Republic, Dec.

2. West Falklands. \*

A. H. Hotland, Esq. [C.]. Vov. H.M.S. 'Challenger.'

## Genus TINAMOTIS, Vigors.

## Tinamotis pentlandi, Vigors.

(Plate I. fig. 5.)

Tinamotis pentlandi, James, New List of Chilian Birds, p. 14 (1892); Salvadori, Cat. Birds B. M. xxvii. p. 568 (1895); Lane, Ibis, 1897, p. 316; Sharpe, Hand-l. i. p. 12 (1899).

Of the four eggs of Pentland's Tinamou in the Collection, two

<sup>\*</sup> These eggs are certainly those of C. elegans, but some mistake has probably been made regarding the locality in which they were collected.

are of a bright green and two of a yellowish-green colour, with numerous white chalky specks. They measure respectively: 2.15 by 1.55; 1.97 by 1.45; 2.22 by 1.5; 2.2 by 1.5.

4. Central Chili (L. Landbeck).

Berkeley James Coll.

## Order GALLIFORMES.

#### Sub-Order MEGAPODII.

## Family MEGAPODIIDÆ.

The eggs of the Megapodes are usually lengthened and narrow. They are either elliptical or biconical or, occasionally, of a regular oval form.

The shell is thin and brittle, rough to the touch, covered with minute pores and glossless.

The shell itself appears to be always white, but it is almost invariably covered by a thin calcareous film, which, however, is easily removed and is of a coffee-brown, reddish-brown or pink colour.

It is well-known that the Megapodes deposit their eggs in mounds of earth and vegetable matter. During the time that the eggs lie buried in these mounds they undergo considerable changes, and when discovered they seldom exhibit their original colour.

The eggs of the Megapodes are remarkably large when compared with the size of the bird.

## Genus MEGAPODIUS, Q. & G.

## Megapodius nicobariensis, Blyth.

Megapodius nicobariensis, Hume & Marsh. Game Birds Ind. iii. App. pl. ii. (1880); Hume, Nests & Eggs, 2nd ed. iii. p. 449 (1890); Grant, Cat. Birds B. M. xxii. p. 447 (1893); Outes, Game Birds Ind. i. p. 384 (1898); Sharpe, Hand-l. i. p. 12 (1899).

The eggs of the Nicobar Megapode when first laid are of a ruddypink colour. After being buried, they turn to pale yellowish-brown, buff or stone-colour. The outer film frequently flakes off in spots, specks and large blotches, causing the shell to be mottled with white. The eggs measure from 3 to 3.4 in length, and from 1.9 to 2.25 in breadth.

4.	Trinkut	Island.	Nicobars, 21st Feb.	Hume Coll.
1.	Trinkut	Island,	23rd Feb.	Hume Coll.
11	Teinlart	Island	Let March	Huma Call

8 Camorta, Nicobars, 27th Feb. Hume Coll. 4. Nancowry, Nicobars, 17th Feb. Hume Coll. Nancowry, 4th March 1. Hume Coll. Nancowry, 9th March. Hume Coll. 3. 2. Hume Coll. Katchall, Nicobars, 19th Feb. 25.Katchall, 8th March. Hume Coll. Hume Coll. 3. Nicobars. 6. Nicobars. E. H. Man, Esq. [P.].

#### Megapodius cumingi, Dillw.

Megapodius cumingi, Dillwyn, P. Z. S. 1851, p. 118; Whitehead, Ibis, 1888, p. 411; Grant, Cat. Birds B. M. xxii, p. 449 (1893); Sharpe, Hand-l. i. p. 12 (1899).

Megapodius dillwini, Steere, List Birds & Mamm. Philip. p. 25 (1890).

The eggs of Cuming's Megapode are of a ruddy pink or reddishbrown colour, turning to pale brown with incubation; two specimens in the Collection, however, are dull white. They measure from 2.9 to 3.3 in length, and from 1.8 to 2 in breadth.

H. Cuming, Esq. [P.].

2. Philippine Islands.
2. Mindanao, Philippines.
3. [Manila.]
4. [Pulo Papan, N.W. Borneo, 13th Oct.
4. Labuan.
5. Gould Coll.
6. Gould Coll.
6. Gould Coll.
7. Gould Coll.
8. Salvin-Godman Coll.
8. Salvin-Godman Coll.

Philippine Islands.

## Megapodius eremita, Hartl.

Megapodius, sp., Brazier, P. Z. S. 1874, p. 606. Megapodius brenchleyi, Meyer, Ibis, 1890, p. 423. Megapodius eremita, Meyer, Ibis, 1890, p. 423; Grant, Cat. Birds

B. M. xxii, p. 452 (1893); Sharpe, Hand-l, i. p. 13 (1899).

The eggs of Brenchley's Megapode vary from pink and rufousbrown to dull stone-colour or brownish cream-colour. They measure from 2.8 to 3.05 in length, and from 1.75 to 1.9 in breadth.

New Britain, 17th July.
 Savu or Galera, Solomon
 Group, 9th Aug.
 Treasury Island, Solomon
 Group, 25th Aug.
 Solomon Islands, Dec.
 Gould Coll.

## Megapodius duperreyi, Less. & Garn.

Megapodius tumulus, Macgillivray, Voy. 'Rattlesnake,' ii. p. 358 (1852); Gould, Handb. Birds Amtr. ii. p. 167 (1865); Campbell, N. & E. Austr. Birds, p. 50 (1883); North, N. & E. Austr. Birds, p. 282 (1889).

Megapodius, sp., Sharpe, P. Z. S. 1874, p. 607.

(J. Macgillivray).

Megapodius duperreyi, Grant, Cat. Birds B. M. xxii. p. 454 (1893); Sharpe, Hand-l. i. p. 13 (1899); Le Souëf, Ibis, 1899, p. 16.

The eggs of Duperrey's Megapode vary from reddish-brown to pale buff or dull cream-colour. They measure from 3.2 to 4 in length, and from 2.05 to 2.2 in breadth.

New Guinea. Rev. W. Wyatt Gill [P.]. 1. Aru Islands. Gould Coll. ł. Endeavour Straits. Gould Coll. 2. Port Essington, Nov. Gould Coll. Cape York, Oct. Capt. Gould Coll. Voy. 11, M.S. 'Rattlesnake.' Stanley). 3. N.W. Australia. The Earl of Derby [P.].

#### Megapodius layardi, Tristr.

Megapodius brazieri, Scl. P. Z. S. 1809, p. 528. Megapodius, sp., Brenchty, Craise of the 'Curaçoa,' p. 241 (1873). Megapodius layardi, Grant, Cat. Birds B. M. xxii. p. 459 (1893): Sharpe, Hand-l. i. p. 13 (1899).

The eggs of Layard's Megapode are brown, dull pink or stone-coloured. They measure from 3·1 to 3·4 in length, and from 1·95 to 2 in breadth.

 Vanua Lava, Banks's Group, New Hebrides.
 Vanua Lava, Aug.
 Banks's Islands, New Hebrides (J. Brazier).
 Tanna, New Hebrides, 5th Dec.
 J. Brenchley, Esq. [P.]. P. L. Sclater, Esq. [P.].
 Voy. H.M.S. 'Herald.'

(J. Macgillivray).

## Megapodius pritchardi, Gray.

Megapodius burnabyi, *Gray. P. Z. S.* 1861, p. 290. Megapodius stairi, *Gray, P. Z. S.* 1861, p. 290; *Whitmee Ibis*, 1875, p. 447.

Megapodius pritchardi, Finsch & Hartl. Fauna Centralpolyn. p 153, pl. ii. fig. 5 (1867); Grant, Cat. Birds B. M. xxii. p. 461 (1893) Sharpe Hand-l. i. p. 13 (1899).

The eggs of Pritchard's Megapode are subject to much variation, being reddish-brown, pinkish, stone-coloured, brown or whitish. They measure from 2.95 to 3.15 in length, and from 1.6 to 1.9 in breadth.

Nina-fou or Hope Island.
 Nina-fou.
 Nina-fou.
 Nina-fou.
 Hapai Island, near Tongatabu.
 Samoa Islands.

Rev. S. J. Whitmee [C.].
Dr. G. Bennett [P.].
R. B. Leaf, Esq. [P.].
Lieut. Burnaby [P.].
Rev. J. B. Stair [P.].

#### Genus LIPOA, Gould.

#### Lipoa ocellata, Gould.

Megapodius (Leipoa) ocellatus, Thien. Fortpflanz. ges. Vög. p. 12, tab. xii. fig. 2 (1845-54).

Leipoa ocellata, Gould, Handb. Birds Austr. ii. p. 155 (1865); Campbell, Nests & Eggs Austr. Birds, p. 50 (1883); North, Nests & Eggs Austr. Birds, p. 281 (1889).

Lipoa ocellata, Grant, Cat. Birds B. M. xxii. p. 463 (1893); Le Souëf, Ibis, 1899, p. 10; Sharpe, Hand-l. i. p. 13 (1899).

Of the eggs of the Ocellated Megapode Mr. North writes:— "Eggs when fresh are of a delicate pinky-white, but after remaining in the mound a few days they become a dirty reddish brown." They measure from 3.45 to 3.75 in length, and from 2.15 to 2.4 in breadth.

Australia.

W. Australia (J. Govld).

3. S. Australia.

1. Gippsland, Victoria.

Gould Coll.

Salvin-Godman Coll.

Sir G. Grey [P.].

F. A. Philbrick, Esq., Q.C. [P.].

#### Genus TALEGALLUS, Less.

#### Talegallus cuvieri, Less.

Talegallus cuvieri, Grant, Cat. Birds B. M. xxii. p. 465 (1893); Sharpe, Hand-l. i. p. 13 (1899).

The only egg of Cuvier's Brush-Turkey in the Collection is brownish buff with a pinkish tinge. It measures 3.75 by 2.5.

1. New Guinea.

Old Collection.

#### Genus CATHETURUS, Swains.

## Catheturus lathami (Lath.).

Megapodius (Talegallus) lathami, Thien. Fortpftanz. ges. Vög. p. 12, tab. xii. fig. 1 (1845-54).

Talegalla lathami, Macgillivray, Voy. 'Rattlesnake,' ii. p. 358 (1852); Bartlett, P. Z. S. 1860, p. 426.

Talegallus lathami, Gould, Handb. Birds Austr. ii. p. 150 (1865); Campbell, Nests & Egys Austr. Birds, p. 50 (1883); North, Nests & Egys Austr. Birds, p. 279 (1889).

Catheturus lathami, Grant, Cat. Birds B. M. xxii. p. 468 (1893); Sharpe, Hand-l. i. p. 14 (1899); Le Souef, Ibis, 1899, p. 14.

The eggs of the Australian Brush-Turkey are white, generally stained with some yellowish smears. They measure from 3.4 to 3.75 in length, and from 2.3 to 2.45 in breadth.

Australia.

2. Australia (J. Gould).

1. Cape York, Nov.

Gould Coll.

Salvin-Godman Coll.

Gould Coll.

CRACIDÆ. 19 ·

2. Cape York, 31st Nov. (Capt. Stanley).

Voy. II.M.S. 'Rattlesnake.'

1. Queensland.

1. Laid in confinement (Lilford

Donald Mackintosh, Esq. [P.]. Lord Lilford [P.].

Aviaries).

1. Laid in confinement (Zool, Gardens, London).

Salvin-Godman Coll.

#### Genus MEGALOCEPHALUM, Temm.

#### Megalocephalum maleo, Hartl.

Megapodius (Megacephaloma) maleo, Thien. Fortpflanz. ges. Vög. p. 11, tab. iv. fig. 1 (1845–54).

Megacephalon maleo, Wallace, Ibis, 1860, p. 142; Meyer, Ibis, 1879,
 p. 139; Grant, Cat. Birds B. M. xxii. p. 472 (1893); Meyer & Wiglesw. B. Celebes, ii. p. 678 (1898).

Megacephalum maleo, Sharpe, Hand-l. i. p. 14 (1899).

The three eggs of the Maleo in the Collection are reddish buff, and measure respectively: 4:3 by 2:3; 4:05 by 2:4; 4:15 by 2:45.

1. Menado, Celebes (A. R. Wallace)

Salvin-Godman Coll.

Wallace).
1. Celebes.

Gould Coll.

Purchased at Malacca.

II. Cuming, Esq. [P.].

#### Sub-Order CRACES.

## Family CRACIDÆ.

The eggs of the Curassows are, as a rule, pointed at both ends or biconical. Some, however, are lengthened ellipses and others are spheroidal in shape.

The shell is very coarse and granulated. The eggs of a few species have a slight gloss; those of the majority are glossless.

The colour is dull white, turning to parchment-white or yellowish white with incubation. When the series is fairly extensive, specimens exhibiting all these variations of colour are represented, and therefore it has not been thought necessary to describe the eggs of each species in the Collection in detail.

Little is known or recorded about the eggs of these birds. It will be seen that very many of the specimens in the Museum have been laid in confinement.

#### Genus CRAX, Linn.

#### Crax alector, Linn.

Crax alector, Grant, Cat. Birds B. M. xxii, p. 475 (1893); Sharpe, Hand-l, i. p. 14 (1899). 20 CRACID.E.

The eggs of the Crested Curassow measure from 3.3 to 3.7 in length, and from 2.45 to 2.75 in breadth.

8. Guiana.

Gould Coll.

1. Guiana.

H. F. Walter, Esq. [P.].

3. Laid in confinement (Zool, Gardens London)

Zool. Society.

dens, London).

#### Crax globicera, Linn.

Crax globicera, Grant, Cat. Birds B. M. xxii. p. 478 (1893); Sharpe, Hand-l. i. p. 14 (1899).

The eggs of the Mexican Curassow measure from 3.3 to 3.85 in length, and from 2.5 to 2.8 in breadth.

8. Laid in confinement (Zool, Gardens, London).

Zool. Society.

1. Laid in confinement (Zool. Gardens, London).

Salvin-Godman Coll.

1. Laid in confinement (Surrey Zool, Gardens, 28th May).

E. Cross, Esq. [P.].

2. British Honduras, 20th April (F. Blancaneaux).

Salvin-Godman Coll.

#### Crax carunculata, Temm.

Crax carunculata, Grant, Cat. Birds B. M. xxii. p. 481 (1893); Sharpe, Hand-l. i. p. 15 (1899).

The single egg of the Wattled Curassow in the Collection measures 3.24 by 2.35.

 Laid in confinement (Zool, Gardens, London).

#### Genus MITUA, Less.

## Mitua mitu (Linn.).

Mitua mitu, Grant, Cat. Birds B. M. xxii. p. 485 (1893); Sharpe, Hand-l. i. p. 15 (1899).

The four eggs of the Razor-billed Curassow in the Collection measure respectively: 3.85 by 2.25; 3.65 by 2.47; 3.65 by 2.25; 3.85 by 2.45.

2. Laid in confinement (Zool, Gardens, London).

Zool. Society. Zool. Society.

1. Laid in confinement, 18th April (Zool. Gardens, London).

. . . . . . .

1. Laid in confinement, 19th April (Zool, Gardens, London).

Zool. Society.

#### Genus PAUXIS. Temm.

## Pauxis pauxi (Linn.).

Pauxis galeata, Rowley, P. Z. S. 1877, p. 684.

Pauxis pauxi, Grant, Cut. Birds B. M. xxii. p. 488 (1893); Sharpe. Hand-l. i. p. 15 (1899). The two eggs of the Helmeted Curassow in the Collection measure respectively: 3.5 by 2.6; 3.48 by 2.42.

2. Laid in confinement (Zool. Gould Coll. Gardens, London).

#### Genus PENELOPE. Merrem.

#### Penelope pileata, Wagler.

Penelope pileata, Grant, Cat. Birds B. M. xxii. p. 500 (1893); Sharpe, Hand-l. i. p. 16 (1899).

The egg of the White-headed Penelope in the Collection measures 2.95 by 2.05.

1. Laid in confinement (Zool. Zool. Society. Gardens, London).

#### Genus ORTALIS, Merrem.

#### Ortalis ruficauda (Jard.).

Ortalis ruficauda, Grant, Cat. Birds B. M. xxii. p. 507 (1893); Sharpe, Hand-l. i. p. 17 (1899).

The egg of Jardine's Guan in the Collection measures 2.45 by 1.7.

1. Tobago.

Salvin-Godman Coll.

## Ortalis albiventris (Wayl.).

Ortalis albiventris, Forbes, Ibis, 1881, p. 357; Grant, Cat. Birds B. M. xxii, p. 508 (1893); Sharpe, Hand-l. i, p. 17 (1899).

The dimensions of the egg of the White-bellied Guan in the Collection are  $2\cdot3$  by  $1\cdot55$ .

 La Grande, Guatemala, 19th Salvin-Godman Coll. March.

## Ortalis maccalli, Baird.

Ortalida vetula, var. maccalli, Baird, Brewer & Ridgw. N. Amer. Birds. iii. p. 398 (1874).

Ortalis vetula maccalli, Bendire, Life Hist. N. A. Birds, i. p. 119, pl. iii. fig. 16 (1892).

Ortalis vetula, pt., Grant, Cat. Birds B. M. xxii, p. 512 (1893).

Ortalis maccalli, Sharpe, Hand-l. i. p. 17 (1899).

The egg of the Lesser Grey-headed Guan in the Collection measures 2:3 by 1:59.

1. Texas (Smiths, Inst.).

Salvin-Godman Coll.

#### Genus ABURRIA, Reichenb.

#### Aburria aburri (Less.).

Aburria carunculata, Scl. & Salv. P. Z. S. 1879, p. 544.

Aburria aburri, Grant, Cat. Birds B. M. xxii. p. 520 (1893); Sharpe, Hand-l. i. p. 18 (1899).

The two eggs of the Black Wattled Guan in the Collection measure respectively: 2.8 by 2; 2.65 by 1.9.

1. Frontino, Antioquia, U.S. Colombia (T. K. Salmon).

Salvin-Godman Coll.

1. Laid in confinement (Zool. Gardens, London).

Zool. Society.

#### Genus CHAMÆPETES, Wagler.

#### Chamæpetes goudoti (Less.).

Chamæpetes goudoti. Scl. & Salv. P. Z. S. 1879, p. 544; Grant, Cat. Birds B. M. xxii. p. 521 (1893); Sharpe, Hand-l. i. p. 18 (1899).

The egg of the Rufous-breasted Sickle-winged Guan in the Collection measures 2.8 by 2.

Retiro, Antioquia, U.S. Colombia (T. K. Salmon).
 Salvin-Godman Coll.

#### Sub-Order PHASIANI.

## Family TETRAONIDÆ.

The eggs of the Grouse are normally of a true oval form, but occasionally they are elliptical or even pyriform. The shell is smooth with a small amount of gloss, and is generally pitted with very minute pores.

#### Genus LAGOPUS, Briss.

The eggs of the True Grouse are cream-coloured, stone-coloured, reddish buff or pale olive, marked with specks, spots and blotches of dark red-brown or chocolate-brown, frequently so dark as to appear black. Some are covered with spots and small blotches; others with well-defined blotches only; and others again with huge confluent patches which almost entirely conceal the ground-colour. An occasional example may be met with which is unmarked and of a whitish colour.

The eggs of the different species of True Grouse caunot be separated with any certainty either by size or colour.

LAGOPUS.

#### Lagorus scoticus (Lath.).

Tetrao albus, Thien, Fortpflanz, ges. Vög. p. 39, tab. viii. figs. 6 a, b, c, d (1845-54).

Lagopus scoticus, Baedeker, Eier Eur. Vög. tab. 46. fig. 5 (1855-63): Dresser, Birds Eur, vii. p. 165 (1873); Grant, Cat. Birds B. M. xxii. p. 35 (1893); Sharpe, Hand-l. i. p. 18 (1899).

Tetrao scoticus, Hewitson, Eggs of Brit. Birds, i. p. 279, pl. lxx. figs. i, ii

(1856); Seebohm, Brit. Birds, ii. p. 428, pl. 20 (1884); id. Eggs of Brit. Birds, p. 272, pl. 59, figs. 10, 12 (1896).

The eggs of the Red Grouse measure from 1.6 to I.9 in length, and from 1.18 to 1.28 in breadth.

6. 9,	Orphir, Orkneys ( <i>Hargitt Coll.</i> ). Scuir Marksie, Loch Luichart, Ross-shire,	Seebohm Coll. Seebohm Coll.
θ.		Beeboum Con.
6.	10th May (W. McRae: Hargitt Coll.). Scuir Marksie, 10th May (W. McR.:	Seebohm Coll.
6.	Hargitt Coll.). Scuir Achadhuire, Loch Luichart, 14th May (W. McR.: Hargitt Coll.).	Seebohm Coll.
8.		Seebohm Coll.
4.	Duclash, Loch Luichart, 30th April (W.	Seebohm Coll.
2.	McR.: Hargitt Coll.). Near Cluny, Ross-shire (W. McR.: Hargitt Coll.).	Seebohm Coll.
2,	Cluny, June (W. McR.: Hargitt Coll.).	Seebohm Coll.
6.	Cluny, June (Hargitt Coll.).	Seebohm Coll.
3.	Dorischan, Ross-shire (Hargitt Coll.).	Seebohm Coll.
9.	Between Cluny and Glen Shiel, 20th May	Seebohm Coll.
	(Hargitt Coll.).	
11.	Knockie, Inverness-shire (J. Richmond: Hargitt Coll.).	Seebohm Coll.
2.	Inverness-shire (W. McR.: Hargitt Coll.).	Seebohm Coll.
$\overline{4}$ .	Forfar.	Salvin-Godman Coll.
9.	Derbyshire, 16th May.	Seebohm Coll.
5. 5.		Seebohm Coll.
υ.	Strines, Derbyshire, 28th May (H. Seebohm).	Deeponin Con.
5.	Ashopton, Derbyshire, 28th May (H. S.).	Seebohm Coll.
5.	Ashopton, 28th May (H. S.).	Seebohm Coll.
υ.	Develor, Lott May (11. 6.).	Calain Calman Call

## Lagopus lagopus (Linn.).

Salvin-Godman Coll.

N. II, Valpy, Esq. [P.].

Ramsley Moor, Derbyshire (O. S.).

2. Lambourne Downs, Berkshire.

8.

Tetrao lagopus, Thien. Fortpflanz. ges. Vög. p. 38, tab. viii. figs. 7 a, b, c, d (1845-54).

Lagopus albus, Baedeker, Eier Eur. Vög. tab. 46. fig. 4 (1855-63): Dresser. Birds Eur. vii. p. 183 (1874); Buird, Brewer & Ridgw. N. Amer. Birds, iii. p. 457 (1874); Seebohm & Harvie-Brown, Ibis, 1876, p. 220; Secbohm, Ibis, 1879, p. 148.

Tetrao saliceti, P. & S. Godman, Ibis, 1861, p. 85; Bree, Birds Eur. iii. p. 212, pl. — (1867).

Lagopus lagopus, MacFarlane, Proc. U.S. Nat. Mus. xiv. p. 430 (1891): Bendire, Lyfe Hist. N. A. Birds, i. p. 69, pl. ii. figs. 5-10 (1892); Grant, Cat. Birds B. M. xxii. p. 40 (1893); Sharpe, Hand-l. i. p. 18 (1899).

The eggs of the Willow-Grouse measure from 1:55 to 1:85 in length, and from 1.15 to 1.25 in breadth.

5. Fort Anderson, Arctic America, 8th Salvin-Godman Coll. June (R. MacFarlane: Henshaw Coll.). Fort Anderson, 8th June (R. McF.: Salvin-Godman Coll. Smiths. Inst.). Fort Anderson, 8th June (R. McF.: Salvin-Godman Coll.

Smiths, Inst.). Anderson River, 10th June (R. MeF.: Salvin-Godman Coll.

Smiths. Inst.). Anderson River, 26th June (R. McF.: Salvin-Godman Coll. Smiths. Inst.).

Bodo, Norway, 6th Feb. (P. & F. Salvin-Godman Coll. Godman).

8. Sweden. Gould Coll. H. F. Walter, Esq. [P.]. Sweden. 3.

4. Scandinavia (Hargitt Coll.).

Seebohm Coll. Seebohm Coll. 10. Lapland (Nordri). 7. Lake Enar, Lapland (Nordri). Seebohm Coll.

Petchora R., lat. 68° N., 20th June (H. Seebohm Coll. 4. Seebohm & J. A. Harrie-Brown).

Petchora R., lat. 68° N., 19th June (H. S. Seebohm Coll. & J. A. H.-B.).

Yenesei R., lat.  $66\frac{1}{5}$ ° N., 4th July (*H. S.*). Yenesei R., lat.  $70\frac{1}{2}$ ° N. (*H. S.*). 5.

Seebohm Coll. Yenesei R., lat.  $71\frac{10}{2}$  N., 3rd July (H. S.). Seebohm Coll.

5. Yenesei R., lat. 71\(\frac{1}{5}\)\circ N., 3rd July (H. S.). Seebohm Coll. St. George Littledale. Altai Mountains.

## Lagopus mutus (Montin).

Seebohm Coll.

Esq. [P.].

Lagopus montanus, Baedeker, Eier Eur. Vög. tab. 46, fig. 1 (1855-63). Lagopus alpinus. Baedeker, Eier Eur. Vög. tab. 46, fig. 3 (1855-63) Wheelwright, Spring & Summ. in Lapland, p. 315 (1871).

Tetrao lagopus, Hewitson, Eggs of Brit. Birds, i. p. 280, pl. lxx. fig. iii (1856).

Lagopus mutus, Dresser, Birds Eur. vii. p. 157 (1874); Grant, Cat. Birds B. M. xxii, p. 44 (1893); Sharpe, Hand-l. i, p. 18 (1899). Tetrao mutus, Seebohm, Brit. Birds, ii. p. 424, pl. 20 (1884); id. Eggs of Brit. Birds, p. 271, pl. 59, figs. 4, 6 (1896).

The eggs of the Common Ptarmigan, as a rule, are paler than the eggs of L. scoticus, and the markings are not so dense. They measure from 1.5 to 1.75 in length, and from 1.15 to 1.3 in breadth.

Near Cluny, Ross-shire, 23rd May Seebohm Coll. (Hargitt Coll.).

Ross, 23rd May (E. Hargitt). Seebohm Coll. Drumnadrochit, Inverness (A. Lawler: 1. Seebohm Coll.

Hargitt Coll.). Grampians, May (A. Newton). Sweden (H. W. Wheelwright). 4. Salvin-Godman Coll.

9. Gould Coll. St. Gothard, Switzerland (Donazien). Seebohm Coll. 6.

Seebohm Coll. 9. Switzerland (Dr. Rey).

#### Lagopus rupestris (Gm.).

Lagopus islandicus, Baedeker, Eier Eur. Vög. tab. 46. fig. 2 (1855-63).
 Lagopus rupestris, Dresser, Birds Eur. vii. p. 175 (1874); MacFarlane,
 Proc. U.S. Nat. Mus. xiv. p. 431 (1891); Bendire, Life Hist. N. A. Birds, i. p. 75, pl. ii. figs. 11-15 (1892); Grant, Cat. Birds B. M. xxii. p. 48 (1893); Sharpe, Hand-l. i. p. 18 (1899).

Lagopus mutus, var. rupestris, Baird, Brewer & Ridgw. N. Amer. Birds.

iii. p. 462 (1874).

Tetrao mutus, Scebohm, Eirds Japan. Emp. p. 372 (1890).

The eggs of the Rock-Ptarmigan have the markings intensely dark. They measure from 1.6 to 1.8 in length, and from 1.15 to 1.25 in breadth.

1. Bering Island, 25th June. (4. E. H. Barrett-Hamilton, Esq. [P.].

7. Japan (H. Pryer).

4. Anderson River, Arctic America, 1st July (R. MacFarlane: Smiths, Just.).

5. Labrador.

3. Greenland.
3. Greenland.

Greenland (Erichson).
 Greenland (H. C. Müller).
 Christianshaab, Disco Bay.

 Christianshaab, Disco Bay Greenland, 14th June.
 Godhaab, Greenland.

5. Iceland (W. Proctor).
6. Iceland (W. P.).

8. Iceland (T. Krüper).

Seebohm Coll.

Salvin-Godman Coll.

Sir H. Peek [P.].

Governor Holböll [C.].

Gould Coll. Seebohm Coll. Seebohm Coll.

Seebohm Coll.
Seebohm Coll.

Seebohm Coll. Salvin-Godman Coll. Seebohm Coll.

## Genus LYRURUS, Swains.

## Lyrurus tetrix (Linn.).

Tetrao tetrix, Thien. Fortpflanz, ges. Vög. p. 42, tab. ix. figs. 2 a, b (1845–54); Hewitson, Eggs of Brit. Birds. i. p. 278, pl. lxix. fig. i (1856); Dresser, Birds Eur. vii. p. 205 (1873); Seebohm & Horvie-Brown, Ibis, 1876, p. 221; Seebohm, Brit. Birds, fii. p. 435, pl. 20 (1884); id. Eggs of Brit. Birds, p. 273, pl. 59, fig. 7 (1896).

Lyrurus teirix, Baedeker, Eier Eier. Vög. tab. 29. fig. 3 (1855-63); Grant, Cat. Birds B. M. xxii. p. 53 (1893); Sharpe, Hand-l. i. p. 19 (1899).

The eggs of the Black Grouse are of various shades of cream-colour, pale yellow and reddish buff, marked with specks, spots and blotches of reddish brown. Some are marked only with small spots; others with both spots and blotches, many of the latter being of considerable size. Occasionally a specimen has a decidedly greenish tinge. They measure from 1.9 to 2.1 in length, and from 1.35 to 1.45 in breadth.

5. Ridesdale, Scotland, 10th July.

5. Glen Shiel, Ross-shire, 23rd May (E. Hargitt).

Seebohm Coll. Seebohm Coll. 1

8. Achmore, Loch Luichart, 20th May (W. McRae: Hargitt Coll.).

Seebohm Coll.
Seebohm Coll.

Glen Luine, Inverness (W. McR.: Hargitt Coll.).

W. R. Ogilvie Grant, Esq. [P.].

2. Crieff, N.B., 28th May.

2. Dumfries-shire (C. Edmondson: Hargitt Coll.).

Seebohm Coll.
Gould Coll.

7. Cumberland (Heysham).

Longshaw, Derbyshire, June Salvin-Godman Coll. (O. S.).

Salvin-Godman Coll.

(F. D. Godman).
2. Wolmer Forest, 13th June.

3. Farnham, Surrey, June (F. D. G.).

Lyndhurst, New Forest, May

Farnham, Surrey, June (F. D.
 Norway.

2. Sweden (H. W. Wheelwright).

6. Livonia (Russow). 1. Moscow, 5th May.

2. Sweden.
6. Livonia (Russow).

Salvin-Godman Coll. Sir T. Wilson [P.] Salvin-Godman Coll. S. O. Sahlin, Esq. [P.].

Col. H. W. Feilden [P.].

Seebohm Coll. Seebohm Coll. Seebohm Coll.

 Petchora R., lat. 68° N., 12th June (H. Seebohm & J. A. Harvie-Brown).

## Lyrurus mlokosiewiczi (Taez.).

(Plate II. fig. 3.)

Tetrao mlokosiewiczi, *Dresser, Birds Eur.* vii. p. 219 (1876). Lyrurus mlokosiewiczi, *Grant, Cat. Birds B. M.* xxii. p. 58 (1893); *Sharpe, Hand-l.* i. p. 19 (1899).

The eggs of the Caucasian Black Grouse are cream-coloured, speckled and spotted with very pale yellowish brown. Two specimens measure respectively: 1.95 by 1.35; 2 by 1.35.

2. Caucasus.

Count Branieki [P.].

## Genus TETRAO, Linn.

## Tetrao urogallus, Linn.

Tetrao urogallus, Thien. Fortpflanz, ges. Vög. p. 40, tab. ix. figs. 1 a, b (1845-54); Baedeker, Eier Eur. Vög. tab. 29, fig. 2 (1855-63); Dresser, Birds Eur. vii. p. 223 (1873); Seebohm, Brit. Birds, ii. p. 440, pl. 21 (1884); Grant, Cat. Birds B. M. xxii. p. 60 (1893); Seebohm, Eggs of Brit. Birds, p. 274, pl. 59, fig. 11 (1896); Sharpe, Hand-l. i. p. 19 (1899).

The eggs of the Capercailzie are broad ovals. The shell is slightly rough and possesses only a small amount of gloss. They are very uniformly of a pale reddish buff, marked with specks, spots and small blotches of reddish brown. In some, the markings consist only of small specks very closely set over the shell: in others, they consist of both specks and spots; in others, again, the markings consist of spots and a number of small blotches of irregular shape. They measure from 2 to 2.4 in length, and from 1.6 to 1.7 in breadth.

Inverness-shire (Hargitt Coll.). 5.

1. Sweden.

Sweden.

ī. Sweden (H. W. Wheelwright: Hargitt Coll.).

5. Russian Lapland (J. Wolley).

Lapland, 8th March (J. W.).

1. Lapland (A. Newton).

3. Livonia (Russow).

Pomerania, 15th May (T. Holland). 5.

Pomerania, 8th May (T. H.).

Seebohm Coll.

S. O. Sahlin, Esq. [P.].

Salvin-Godman Coll.

Seebohm Coll.

Seebohm Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

#### Genus CANACHITES, Stein.

#### Canachites canadensis (Linn.).

Tetrao canadensis, Ross, Nat. Hist. Rev. 1862, p. 283.

Canace canadensis, var. canadensis, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 416 (1874).

Dendragapus canadensis, Bendire, Life Hist. N. A. Birds, i. p. 51, pl. i. figs, 20-23 (1892).

Canachites canadensis, Grant, Cat. Birds B. M. xxii. p. 69 (1893); Sharpe, Hand-l. i. p. 19 (1899).

The eggs of the Canada Grouse are of a reddish-buff colour, spotted and boldly blotched with deep chocolate-brown. The specimens in the Collection measure from 1.52 to 1.75 in length, and from 1.12 to 1.2 in breadth.

N. America.

N. America (Smiths. Inst.).

Fort Rae, Gt. Slave Lake (Henshaw Coll.).

1. Mackenzie River District.

• Rocky Mountains, British Columbia (J. K. Lord).

Purchased of Warwick,

Salvin-Godman Coll.

Salvin-Godman Coll.

B. R. Ross, Esq. [P.].

N. Amer. Bound. Comm.

## Genus DENDRAGAPUS, Elliot.

## Dendragapus richardsoni (Dougl.).

Tetrao obscurus, Lord, Proc. R. A. Inst., Woolwich, iv. p. 339 (1865). Dendragapus obscurus, var. richardsoni, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 427 (1874); Bendire, Life Hist. N. A. Birds, i. p. 50 (1892) \*.

Dendragapus richardsoni, Grant, Cat. Birds B. M. xxii. p. 76 (1893): Sharpe, Hand-l. i. p. 20 (1899).

The two eggs of Richardson's Capercailzie in the Collection are of a creamy-buff colour, thickly sprinkled all over with small spots and irregular marks of pale rufous brown. They measure respectively: 1.82 by 1.25; I.83 by 1.28.

2. Rocky Mountains, British Columbia (J. K. Lord).

N. Amer. Bound. Comm.

<sup>\*</sup> The eggs of the allied species, D. fuliginosus, are figured by Bendire, t. c. pl. i. figs. 16-19.

#### Genus TYMPANUCHUS, Gloger.

#### Tympanuchus americanus (Reichenh.).

Cupidonia americana, Baedeker, Eier Eur. Vög. tab. 77. fig. 4 (1855-63).
Cupidonia cupido, var. cupido, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 440, part (1874).

Tympanuchus americanus, Bendire, Life Hist. N. A. Birds, i. p. 88, pl. ii. figs. 18-20 (1892); Grant, Cat. Birds B. M. xxii. p. 78 (1893); Sharpe, Hand-l. i. p. 20 (1899).

The eggs of the Prairie-Hen vary from cream-colour to olivebuff. Some are perfectly unmarked; others are sprinkled with minute dots and spots of deep reddish brown, chiefly at the small end; and others again are mottled with streaky spots of pale rufous and brown. They measure from 1.65 to 1.75 in length, and from 1.22 to 1.3 in breadth.

 Red River Prairie, Canada, 21st June (G. M. Dawson).
 N. America (Henshaw Coll.). N. Amer. Bound. Comm.

2. Winnebogo, Illinois (J. W. Tolman: Henshaw Coll.).

Salvin-Godman Coll. Salvin-Godman Coll.

3. Laid in confinement (Zool. Gardens, London).

Zool, Society.

#### Genus CENTROCERCUS, Swains.

#### Centrocercus urophasianus $(B_{P}.)$ .

Centrocercus urophasianus, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 429 (1874); Bendire, Life Hist. N. A. Birds, i. p. 106, pl. iii. figs. 11-13 (1892); Grant, Cat. Birds B. M. xxii. p. 81 (1893); Sharpe, Hand-l. i. p. 20 (1899).

The eggs of the Sage-Grouse are of a brownish cream-colour or pale greenish stone-colour, marked all over with spots and small blotches of a deep reddish-brown or chocolate colour. They measure from 2.07 to 2.2 in length, and from 1.45 to 1.55 in breadth.

N. America (Smiths, Inst.).
 Gilmer, Wyoming Territory

Salvin-Godman Coll. Salvin-Godman Coll.

(H. R. Durkee: Henshaw Coll.).

#### Genus PEDIŒCETES, Baird.

## Pediœcetes phasianellus (Linn.).

Pediœcetes phasianellus, Ross, Nat. Hist. Rev. 1862, p. 283; Blakiston, Ibis, 1862, p. 8; 1863, p. 124; Sharpe, Hand-l. i. p. 20 (1899).

Pediecetes phasianellus, var. phasianellus, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 434 (1874).

Pediocates phasianellus, Nelson, Report Nat. Hist. Alaska, p. 139 (1887); Bendire, Life Hist. N. A. Birds, i. p. 97, pl. iii. figs. 3-5 (1892); Grant, Cat. Birds B. M. xxii. p. 82 (1893).

The eggs of the Northern Sharp-tailed Grouse vary in colour

from dark cream to brownish buff. Many are unmarked; others are very sparingly speckled with deep reddish brown or purplish brown. They measure from 1.63 to 1.77 in length, and from 1.22 to 1.26 in breadth.

[N. America.] Salvin-Godman Coll. Yukon, Alaska, 29th May Salvin-Godman Coll. (J. Lockhart: Smiths. Inst.). Fort Yukon, Alaska (S. Jones:

Henshaw Coll.).

1. Fort Resolution. 1. Carlton, Canada, 21st May (Capt. Blakiston).

Salvin-Godman Coll.

B. R. Ross, Esq. [P.]. Salvin-Godman Coll.

#### Pediœcetes columbianus (Ord).

Pediœcetes phasianellus, var. columbianus, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 436 (1874).

Pediecetes phasianellus columbianus, Coues, Bull. U. S. Geol. Surv. iv.

p. 630 (1878).

Pediocætes phasianellus columbianus, Bendire, Life Hist, N. A. Birds, i. p. 98, pl. iii. figs. 6-8 (1892).

Pediocætes columbianus, Grant, Cat. Birds B. M. xxii, p. 83 (1893). Pediœcetes columbianus, Sharpe, Hand-l. i. p. 20 (1899).

The three eggs of the Columbian Sharp-tailed Grouse in the Collection are of a dark buff-colour, very minutely speekled with dark brown over the whole shell. They can be matched very closely by some of the eggs of P, phasianellus. They measure respectively:

3. Pembina, Dakota, 11th June (E. Coues; Smiths, Inst.).

1.65 by 1.2; 1.6 by 1.2; 1.65 by 1.18.

Salvin-Godman Coll.

## Genus BONASA, Steph.

## Bonasa umbellus (Linn.).

Tetrao umbellus, Thien. Fortpflanz. ges. Vog. p. 45, tab. ix. fig. 4 (1845-54). Bonasia umbellus, Baedeker, Eier Eur. Vog. tab. 77. fig. 5 (1855-63).

Bonasa umbellus, Ross, Nat. Hist. Rev. 1862, p. 283; Bendire, Life Hist. N. A. Birds, i. p. 59, pl. ii. fig. 1 (1892); Grant, Cat. Birds B. M xxii, p. 85 (1893); Sharpe, Hand-l. i. p. 21 (1899).

Bonasa umbellus, var. umbellus, Baird, Brewer & Ridgw. N. Amer. Birds. iii, p. 448 (1874).

Bonasa umbellus, var. umbelloides \*, iid. t. c. p. 453.

Bonasa umbellus, var. sabini, iid. t. c. p. 454.

Bonasa umbellus togata, Bendire, Life Hist. N. A. Birds, i. p. 64, pl. ii. fig. 2.

Bonasa umbellus umbelloides, id. t. c. p. 67, pl. ii. fig. 3.

Bonasa umberlus sabini, id. t. c. p. 68, pl. ii. fig. 4.

Bonasa togata, Sharpe, Hand-l. 1, p. 21 (1899).

Bonasa umbelloides, id. t. c. p. 21.

Bonasa sabinei, id. t. c. p. 21.

<sup>\*</sup> I follow Mr. Grant in uniting all the races of this species. Dr. Sharpe keeps them separate, but quotes Professor Coues to the effect that B. toguta cannot be upheld, though B. umbelloides and B. sabinei are fairly recognizable.

The eggs of the different races of the Ruffed Grouse are extremely variable in colonr. The majority are of various shades of cream-colour: some are perfectly unmarked; others show a few small spots of pale rufous: a few are rather profusely spotted with pale reddish brown, and some are marked with a few pale washed-out purple blotches. Three specimens in the Collection are of a buff-colour, minutely but thickly speckled with dark rufous.

One specimen is unusually large and measures 1.8 by 1.35. Others of normal size measure from 1.45 to 1.7 in length, and from 1.1 to 1.3 in breadth.

N.W. America. 4

N. America. N. America (Smiths. Inst.).

Mackenzie River District. Fort Simpson, 7th June. 1.

British Columbia (J. K. Lord). Musquash River, New Bruns-:;.

wick, May (Arthur Dresser).

Massachusetts (Henshaw Coll.).

Gould Coll.

A. D. Bartlett, Esq. [P.].

Salvin-Godmau Coll.

B. R. Ross, Esq. [P.].B. R. Ross, Esq. [P.].

N. Amer. Bound. Comm. Salvin-Godman Coll.

Salvin-Godman Coll.

## Genns TETRASTES, Keys. & Blas.

## Tetrastes bonasia (Linn.).

Tetrao bonasia, Thien. Fortpflanz. ges. Vöy. p. 46, tab. ix. figs. 5 a, b (1845-54); Bree, Birds Eur. iii. p. 203, pl. — (1867).

Bonasia sylvestris, Baedeker, Eier Eur. Vog. tab. 29, fig. 1 (1855-63). Bonasa betulina, Dresser, Birds Eur. vii. p. 193 (1871).

Tetrastes bonasia, Seebohm, Ibis, 1879, p. 147; Grant, Cat. Birds B. M. xxii, p. 90 (1893); Sharpe, Hand-l. i, p. 21 (1899).

The eggs of the Hazel-Grouse vary from cream-colour to reddish buff, and are much speckled and spotted, and sometimes blotched. either with deep reddish brown or with pale rufous. They measure from 1.45 to 1.6 in length, and from 1.08 to 1.2 in breadth.

Northern Europe.

3. Sweden. 1. Lapland, 16th & 17th June (J. Wolley).

Archangel (Nordri).

Vosges Mountains (Mouzel: Hargitt Coll.).

Yenesei, lat. 66½° N., 25th June (H. Seebohm).

Purchased of Warwick. S. O. Sahlin, Esq. [P.]. Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

## Family PHASIANIDÆ.

The eggs of the Pheasants and Partridges vary greatly in form and colour. Typically they resemble in shape the egg of the common domestic Fowl, but in some species they are pyriform, and in others of a spheroidal shape. The shell, as a rule, possesses a considerable amount of gloss and is covered with pores or pits which vary in depth and distinctness in proportion to the size of the eggs. When these are small, the pores are nearly obsolete, when large they are deep and conspicuous.

#### Genus TETRAOGALLUS, J. E. Gray.

The eggs of the species of Snow-Cocks bear a very close resemblance to each other. They are of a regular oval shape and the shell is moderately fine and glossy. The ground varies from buff to pale olive-brown or stone-colour and this is speckled and spotted, and occasionally blotched, with pale chestnut, purple and umber-brown.

# Tetraogallus tibetanus, Gould. (Plate II. fig. 7.)

Tetraogallus tibetanus, Hume & Marsh, Game Birds Ind.i. p. 275 (1879); Grant, Cat. Birds B. M. xxii. p. 104 (1893); Oates, Game Birds Ind. i. p. 205 (1898); Sharpe, Hand-l. i. p. 22 (1899).

The single egg of the Tibetan Snow-Cock in the Collection measures 2.4 by 1.7.

1. 3 miles south of the Pangour Tso, Hume Coll. Tibet.

# Tetraogallus altaicus (Gebler).

(Plate II. fig. 8.)

Tetraogallus altaieus, Grant, Cat. Birds B. M. xxii. p. 110 (1893): Sharpe, Hand-l. i. p. 22 (1899).

The two eggs of the Altai Snow-Cock in the Collection are of precisely the same size and measure 2.65 by 1.85.

2. Altai Mountains, 3rd May (C. A. Seebohm Coll. Tancré).

## Tetraogallus himalayensis (J. E. Gray).

Tetraogallus himalayensis, Hume & Marsh. Game Birds Ind. i. p. 267 (1879), iii. App. pl. iii. (1880); Biddulph, Ibis, 1881, p. 93; Scully. Ibis, 1881, p. 586; Outes ed. Hume, Nests & Fygs Ind. B. iii. p. 426 (1890); Grant, Cat. Birds B. M. xxii. p. 106 (1893); Outes, Game Birds Ind. i. p. 201 (1898); Sharpe, Hand-l. i. p. 22 (1899).

One egg of the Himalayan Snow-Cock in the Collection is abnormal, the ground being cream-coloured, spotted with pale purple.

The eggs vary from 2.5 to 2.8 in length, and from 1.75 to 2 in breadth.

1. Samarcand, 21st April.

1. Gilgit, 10,000 feet, 28th April (Dr. Scully).

6. Ladak.

4. Nelang, 14,000 feet, 10th June.

1. Lahoul.

5. Hills near Gangaotri.

1. Himalayas.

5. Himalayas.

Seebohm Coll. Seebohm Coll.

Hume Coll.

Hume Coll.

Hume Coll.

Major Charlton [P.].

Hume Coll.

#### Tetraogallus caspius (Gm.).

Tetraogallus caspius, Danford, Ibis, 1878, p. 29; Dresser, Birds Eur. vii. p. 241 (1878); Grant, Cat. Birds B. M. xxii. p. 108 (1893); Sharpe, Hand-l. i. p. 22 (1899).

The eggs of the Caspian Snow-Cock measure 2.6 in length, and from 1.8 to 1.87 in breadth.

4. Taurus, Asia Minor, 23rd April.

C. G. Danford, Esq. [P.].

2. Taurus, 25th April.

C. G. Danford, Esq. [P.].

#### Tetraogallus caucasicus (Pall.).

Oreotetrax caspia, Cab. J. f. O. 1873, p. 63, tab. iii. fig. 36.

Tetraogallus caucasicus, Bree, Birds Eur. 2nd ed. iv. p. 111, pl. — (1875); Dresser, Birds Eur. vii. p. 237 (1878); Grant, Cat. Birds B. M. xxii. p. 109 (1893); Sharpe, Hand-l. i. p. 22 (1899).

Megaloperdix caucasica, Lorenz, Beitr. Orn. Kaukas. p. 55 (1887).

The eggs of the Caucasian Snow-Cock measure from 2.55 to 2.7 in length, and from 1.7 to 1.75 in breadth.

2. Caucasus (Lorenz).

Seebohm Coll.

2. Caucasus, 22nd May.

Seebohm Coll.

## Genus CACCABIS, Kaup.

The eggs of the Red-legged Partridges are typically of a regular oval form, but pyriform eggs are of frequent occurrence. They vary in colour from a pale creamy white to a pale creamy buff and they are generally spotted. The shell is smooth and glossy.

## Caccabis saxatilis (Wolf & Meyer).

Perdix graca, Thien. Fortpflanz. ges. Vög. p. 27, tab. vii. figs. 5 a, b (1845-54).

Perdix saxatilis, Baedeker, Eier Eur. Vöy. tab. 21. fig. 3 (1855-63), Caccabis saxatilis, Dresser, Birds Eur. vii. p. 93 (1875); Grant, Cat. Birds B. M. xxii. p. 111 (1893); Sharpe, Hand-l. i. p. 22 (1899).

The markings on the eggs of the Rock Red-legged Partridge consist of specks and small spots of pale reddish brown or purplish

CACCABIS. 33

grey, evenly distributed over the shell. Some examples have small blotches in addition to spots. They measure from 1.7 to 1.85 in length, and from 1.2 to 1.3 in breadth.

2. Swiss Alps, June. Seebohm Coll. Seebohm Coll. Swiss Alps. 4. Switzerland. Seebohm Coll. 8. Switzerland. Seehohm Coll.

#### Caccabis chukar (J. E. Gray).

Perdix græca, Baedeker, Eier Eur. Vög, tab. 67, fig. 2 (1855-63); Bree, Birds Eur. iii. p. 242, pl. — (1867).

Caecabis saxatilis, Simpson, Ibis, 1860, p. 388; Tristram, Ibis, 1868, p. 213.

Caccabis chukar, Dresser, Birds Eur. vii. p. 97 (1875); Grant, Cat. Birds B. M. xxii, p. 113 (1893); Oates, Game Birds Ind. i, p. 179 (1898); Sharpe, Hand-l. i. p. 22 (1899).

Caccabis chukor, Hume & Marsh. Game Birds Ind. ii. p. 33 (1879); Oates ed, Hume, Nests & Eggs Ind, B. iii. p. 431 (1890).

Eggs of the Chukor Partridge taken in Greece are frequently unmarked. Those from the Grecian Archipelago and Cyprus are for the most part slightly spotted, and there are only two specimens in the Collection from these parts which may be said to be boldly marked.

More to the eastward the eggs of this species are found to be in all cases spotted and frequently blotched with purplish, reddish or yellowish brown, and with grey and pink. They measure from 1.55 to 1.9 in length, and from 1.15 to 1.3 in breadth.

1. Laid in confinement (Zool, Gardens, London). Athens, 11th April (T. Krüper).

9. Athens, 26th April (Seebohm & Kr"iper).

Delphi, Greece, 3rd May (S. & K.). 3. 3. Delphi, 3rd May.

Tzipiana, Greece, 6th May (W. H. 5. Simpson).

The Cyclades, 15th  $\Lambda$ ug. (T. Kr"uper).

Cyprus. 4. Mount Sinai.

1. Marsaba, Palestine, 30th March (H. B. Tristram).

Moab, March. 6. Jericho, March. 6.

Jerieho, March (H. B. Tristram). 6.

Kirina, Persia, 1st Oct. 4. 5. Kurdistan, 24th May.

Tibet, 29th July, 16,000 feet (F. Wilson).

·2. India. VOL. I.

16. Agrore Valley, May. Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll. Seebohm Coll.

Lord Lilford [P.].

Gould Coll. Salvin-Godman Coll.

Canon Tristram [C.]. Canon Tristram [C.]. Salvin-Godman Colf.

Sir Kenneth Loftus [P.]. Sir Kenneth Loftus [P.].

Hume Coll.

Gould Coll. Hume Coll.

D

5. Puniab. Prof. Oldham [P.]. 3. Dhurumsala, N.W. Himalayas, Hume Coll. 12th April. Kooloo, İst April. Hume Coll. Nelang, 10th June. Hume Coll. Bussahir, 18th May. Hume Coll. Wild Rose Camp, 29th June. Sir W. M. Conway [P.]. 9. Kotegurh, 9th March. Hume Coll. Kotegurh, 10th March. Kotegurh, 10th April. Hume Coll. 5. 3. Hume Coll. Kotegurh, 10th April. Kotegurh, 17th April. 1. Hume Coll. 12. Hume Coll. 9. Kotegurh, 18th April. Hume Coll. Kotegurh, 19th April. Hume Coll. Kotegurh, 20th April. Kotegurh, 21st April. 13. Hume Coll. 6. Hume Coll. Kotegurh, 23rd April. 6. Hume Coll. Kotegurh, 30th April. 1. Hume Coll. 8. Kotegurh, 30th April. 1. Kotegurh, 10th May. 1. Kotegurh, 16th May. Hume Coll. Hume Coll. Hume Coll. 5. Kotegurh, 18th May. Hume Coll. 15. Kotegurh, 20th May. Kotegurh, 31st May. Hume Coll. Hume Coll.

#### Caccabis rufa (Linn.).

Perdix rubra, Thien. Fortpflanz. ges. Vög. p. 29, tab. vii. figs. 6, a, b (1845–54); Baedeker, Eier Eur. Vög. tab. 21, fig. 2 (1855–63).

Perdix rufa, Hewitson, Eggs of Brit. Birds, i. p. 282, pl. lxxi. fig. ii (1856); Scebohn, Brit. Birds, ii. p. 457, pl. 20 (1884); id. Eggs of Brit. Birds, p. 276, pl. 59, fig. 8 (1896).

Caccabis rufa, Saûnders, Îbis, 1871, p. 223; Dresser, Birds Eur. vii. p. 103 (1875); Grant, Cat. Birds B. M. xxii. p. 118 (1893); Sharpe, Hand-l. i. p. 22 (1899).

The eggs of the Common Red-legged Partridge closely resemble those of *C. chukar*, but are apparently always spotted. They measure from 1.5 to 1.6 in length, and from 1.15 to 1.25 in breadth.

6. Great Britain (Hargitt Coll.). Seebohm Coll. Cumberland (*Heysham*). Gould Coll. Cambridge (H. Saunders). Seebohm Coll. 3. Elveden, Norfolk (A. Newton). Salviu-Godman Coll. Loughton, Essex (J. W. Mait-9. Salvin-Godman Coll. land). Sir T. Wilson [P.]. Charlton Park, Kent. 1. Malaga, Spain, 1st June (H. Seebohm Coll. Saunders). 1. Malaga, 8th June (H. S.). Seebohm Coll. 10. Seville, Spain, 20th May (Ruiz). Seebohm Coll. J. Whitehead, Esq. [C.]. Corsica.

## Caccabis petrosa (Gm.).

Perdix petrosa, Thien. Fortpflanz, ges. Vög. p. 28, tab. vii. fig. 7 (1845-54);
Baedeker, Eier Eur. Vög. tab. 21. fig. 4 (1855-63).
Caccabis petrosa, Salvin, Ibis, 1859, p. 353; Tristram, Ibis, 1860, p. 72;

Saunders, Ibis, 1871, p. 223; Dresser, Birds Eur. vii. p. 111 (1875); Dixon, Ibis, 1882, p. 577; Grant, Cat. Birds B. M. xxii. p. 120 (1893); Irby, Orn. Str. Gibr. 2nd ed. p. 239 (1895); Sharpe, Hand-l. i. p. 22 (1899).

The eggs of the Barbary Red-legged Partridge are more variable

in colour than those of any other species of the genus.

Cibrolton (II Samulana)

Some are very minutely and closely spotted with rufous, and others are very boldly blotched and smudged with the same. Some examples from Tunis are marked with grevish brown, without a trace of rufous. The markings on a few specimens are so minute that they might easily pass unobserved. The eggs measure from 1.55 to 1.75 in length, and from 1.15 to 1.25 in breadth.

C. . 1. . 1. . . C. 11

1.	Cubrantar (11. Baunaers).	Seebonin Con.
1.	Tangiers (L. II. Irby).	Seebohm Coll.
1.	N. Africa.	Gould Coll.
1.	N. Africa.	H. F. Walter, Esq. [P.].
1.	N. Africa.	R. T. Frere, Esq. [P.].
8.	Tunis.	Louis Fraser, Esq. [C.].
3.	Algeria, April (H. B. Tristram).	Seebohm Coll.
8.	Algeria, May (C. Dixon).	Seebohm Coll.
	Kef Laks, Algeria, 15th April	Salvin-Godman Coll.
	(O. Salvin).	
4.	Kef Laks, 16th April (O. S.).	Salvin-Godman Coll.
	Kef Laks, 20th April (O. S.).	Salvin-Godman Coll.

#### Genus AMMOPERDIX, Gould.

The eggs of the Rock-Partridges vary in shape from a broad oval to pyriform, but sometimes they are narrow and elongated. The shell is fine and smooth and usually possesses a considerable amount of gloss.

In colour the eggs vary from white to ereamy-white or pale buff. Some few specimens are speckled with grey and reddish brown, but the majority are quite plain.

## Ammoperdix bonhami (Fraser). (Plate II, figs. 1 & 2.)

Ammoperdix bonhami, Hume & Marsh. Game Birds Ind. ii. p. 45 (1879); Dresser, Birds Eur. vii. p. 117 (1880); Oates ed. Hume, Nests & Eggs Ind. E. iii. p. 433 (1890); Grant, Cat. Birds B. M. xxii. p. 123 (1893); Oates, Game Birds Ind. i. p. 185 (1898); Sharpe, Hand-l, i. p. 23 (1899).

The eggs of the Seesee Partridge, or Bonham's Rock-Partridge, measure from 1.3 to 1.5 in length, and from 1 to 1.1 in breadth.

S. Butcher, Esq. [P.]. Jask, Gulf of Oman, April. 9. Khewra, Salt Range, Punjab, Hume Coll. 12.23rd April. Prof. Oldham [P.]. 9. Punjab. Attock, 5th May. Hume Coll. 4. 13. [N.W. India.] Hume Coll.

#### Ammoperdix heyi (Temm.).

Caccabis heyii, Tristram, Ibis, 1859, p. 36.

Ammoperdix heyi, Tristram, Ibis, 1868, p. 214; Grant, Cat. Birds B. M. xxii. p. 125 (1893); Sharpe, Hand-l. i. p. 23 (1899).

The eggs of Hey's Rock-Partridge measure from 1.37 to 1.5 in length, and from 1 to 1.07 in breadth.

Jericho, 1st April (H. B. Tristram). Canon Tristram [C.].

Jericho, 13th April (H. B. T.). Canon Tristram [C.]. 2. Jericho, 13th April (H. B. T.). Salvin-Godman Čoll.

1. Jericho, 12th April (J. H. Cochrane). H. Saunders, Esq. 1. Jericho, 17th April (J. H. C.). H. Saunders, Esq.

#### Genus FRANCOLINUS, Stephens.

The eggs of the Francolins are of two types as regards their form. So far as can be judged from the specimens in the Collection, it appears that those of the African species are of a very regular oval shape, whereas those of the European and Asiatic species are pyriform, one end being usually very broad and rounded, and the other abruptly pointed. The shell is glossy, and in some cases highly so.

#### Francolinus francolinus (Linn.).

Francolinus vulgaris, Baedeker, Eier Eur, Vög. tab. 21, fig. 1 (1855-63); Dresser, Birds Eur. vii. p. 123 (1876): Hume & Marsh. Game Birds Ind. ii. p. 9 (1879); Oates ed. Hume, Nests & Eggs Ind. E. iii. p. 428 (1890); Sharpe, Ibis. 1891, p. 111.

Perdix francolinus, Bree, Birds Eur. iii. p. 236. pl. — (1867).

Francolinus francolinus, Grant, Cat. Birds B. M. xxii. p. 132 (1893): Oates, Game Birds Ind., i. p. 156 (1898); Sharpe, Hand-l. i. p. 23 (1899).

The eggs of the Common or Black Francolin vary considerably in colour, being of an olive-brown, drab, buff or stone-colour or even of a very pale green. They are quite plain, but some examples exhibit white spots, as if the outer layer of the shell had become disintegrated \*. The eggs measure from 1.35 to 1.8 in length, and from 1.15 to 1.4 in breadth.

Cyprus, 24th April (Lord Lilford). 1. Cilicia, Asia Minor (T. Krüper). Seebohm Coll.

4. Asia Minor, 7th May.

2. Syria, 4th June.

Fao, Persian Gulf. Fao, 28th May.

Fao, 17th June. 4.

Fao, 22nd June. 5. Sind (J. H. Gould).

Eastern Narra, Sind (S. Doig).

Lord Lilford [P.].

Seebohm Coll. Seebohm Coll.

W. D. Cumming, Esq. [P.].

W. D. Cumming, Esq. [P.].

W. D. Cumming, Esq. [P.]. W. D. Cumming, Esq. [P.].

Gould Coll.

Hume Coll.

<sup>\*</sup> Thienemann figures the egg of this species (Fortpflanz, p. 31, tab. vii. fig. 8) as densely spotted. The figure probably represents the egg of some species of Caccabis.

Near Simla. Hume Coll. Koomersain, Simla, 1st July, Hume Coll. 4. Kotegurh, 24th May, Hume Coll. 4. Kotegurh, 17th June. Hume Coll. 12. Gurhwal, June. Hume Coll. Sultanpur, 10th July. 4. Hume Coll. 1. Sultanpur, 15th July, Hume Coll Sirsa. 3. Hume Coll

# Francolinus chinensis (Osbeck). (Plate II. fig. 4.)

Francolinus chinensis, Hume & Marsh. Game Birds Ind. ii. p. 27 (1879);
Oates ed. Hume, Nests & Egys Ind. B. iii. p. 431 (1890); Grant, Cat.
Birds B. M. xxii. p. 136 (1893); Oates, Game Birds Ind. i. p. 165
(1898); Sharpe, Hand-l. i. p. 23 (1899).

The eggs of the Chinese Francolin vary from cream-colour to buff. They differ greatly in size, measuring from 1.25 to 1.6 in length, and from 1.05 to 1.2 in breadth.

- Palow, Lower Burma, June (E. W. Hume Coll. Oates).
- 4. Upper Burma, 20th May (E. W. O.). Oates Coll.

O. Meiktila, Upper Burma, 12th Sept. Oates Coll. (E. W. O.).

# Francolinus pictus $(J. \mathcal{S} \cdot S.)$ . (Plate II, fig. 5.)

Francolinus pictus, Hume & Marsh. Game Birds Ind. ii. p. 19 (1879);
Legge, Birds Ceyl. p. 744 (1880); Oates ed. Hume, Nests & Eggs
Ind. B. iii. p. 430 (1890); Grant, Cat. Birds B. M. xxii. p. 138 (1893); Oates, Game Birds Ind. i. p. 161 (1898); Sharpe, Hand-l. i. p. 23 (1899).

The eggs of the Painted Francolin are of a cream, buff or stone-colour, and a tinge of green is present in some of the specimens. They are extremely short in relation to their width, varying from 1.3 to 1.5 in length, and from 1.1 to 1.25 in breadth.

 Jhansi, India, 11th Aug. (F. R. Hume Coll. Blewitt).

## Francolinus pondicerianus (Gm.).

(Plate II. fig. 6.)

Francolinus pondicerianus, Layard, Ann. & Mag. N. H. 2nd ser. xiv. p. 107 (1854); Grant, Cat. Birds B. M. xxii. p. 141 (1893); Sharpe, Hand-l. i, p. 23 (1899).

Ortygornis pondicerianus, Hume & Marsh. Game Birds Ind. ii. p. 51 (1879); Legge, Birds Ceyl. p. 749 (1880); Outes ed. Hume, Nests & Eggs Ind. B. iii. p. 435 (1890); Oates, Game Birds Ind. i. p. 170 (1898).

The eggs of the Grey Francolin vary from cream-colour to very pale creamy buff, and measure from 1.2 to 1.45 in length, and from .95 to 1.15 in breadth.

3. Agra, 27th March. Hume Coll. 2. Etawah. Hume Coll. 5. Etawah, 25th March. Hume Coll. 1. Jhansi, 11th May. Hume Coll. 1. Mirzapur, 5th March. Hume Coll. 1. Ceylon. E. L. Layard, Esq.	2. 4. 3. 4. 4. 2. 7. 6. 2. 2.	Delhi, 3rd April. Delhi, 23rd April (C. T. Bingham). Delhi, 7th May (C. T. B.).	Gould Coll. Hume Coll. Gould Coll. Salvin-Godman Coll. Hume Coll. Hume Coll. Hume Coll. Hume Coll. Hume Coll. Hume Coll.
2. Etawah.       Hume Coll.         5. Etawah.       Hume Coll.         1. Jhansi, 11th May.       Hume Coll.         1. Mirzapur, 5th March.       Hume Coll.         1. Ceylon.       E. L. Layard, Esq.	2.	Delhi, 23rd April (C. T. Bingham).	Hume Coll.
	2.	Delhi, 7th May (C. T. B.).	Hume Coll.
<ol> <li>Jhansi, 11th May.</li> <li>Mirzapur, 5th March.</li> <li>Ceylon.</li> <li>Hume Coll.</li> <li>Hume Coll.</li> <li>L. Layard, Esq.</li> </ol>	3.	Agra, 27th March.	Hume Coll.
	2.	Etawah.	Hume Coll.
	1. 1.	Jhansi, 11th May. Mirzapur, 5th March.	Hume Coll. Hume Coll. E. L. Layard, Esq.

#### Francolinus kirki, Hartl.

Francolinus kirki, Grant, Cat. Birds B. M. xxii. p. 149 (1893); Sharpe, Hand-l. i. p. 23 (1899).

The eggs of Kirk's Francolin have an excessively thick coarse shell, deeply pitted all over. They are of a pale yellowish cream-colour. Four examples measure respectively: 1.46 by 1.17; 1.47 by 1.15; 1.45 by 1.15; 1.49 by 1.15.

4. Ruo River, British Central Africa, A.B. 4th Dec.

A. B. Percival, Esq. [C.].

## Francolinus africanus (Steph.).

Perdix afra, Thien. Fortpflanz. ges. Vög. p. 32, tab. vii. fig. 11 (1845-54). Francolinus afer, Sharpe, ed. Layard, Birds S. Africa, p. 595 (1875-84). Francolinus africanus, Grant, Cat. Birds B. M. xxii. p. 152 (1893); Sharpe, Hand-l. i. p. 24 (1899).

Of the two eggs of the Pearl-breasted Francolin in the Collection, one is of a pale stone-colour, the other of a pale olive-brown. Both are sprinkled with very minute brown specks. They measure respectively: 1.55 by 1.15; 1.55 by 1.2.

Cape Colony.
 South Africa (E. L. Layard).
 H. F. Walter, Esq. [P.].
 L. Layard, Esq. [P.].

# Francolinus gularis (*Temm.*). (Plate III. fig. 7.)

Ortygornis gularis, Hume & Marsh. Game Birds Ind. ii. p. 59 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 437 (1890); Oates, Game Birds Ind. i. p. 174 (1898). Francolinus gularis, Grant, Cat. Birds B. M. xxii. p. 158 (1893); Sharpe,

Hand-l. i. p. 24 (1899).

The eggs of the Indian Swamp-Partridge are of a pale rufous

cream-eolour, with numerous purplish specks at the larger end. They measure from 1.44 to 1.5 in length, and from 1.16 to 1.23 in breadth.

4. Khoolna, Jessore, 13th April (H. J. Hume Coll. Rainey).

# Francolinus bicalcaratus (Linn.).

(Plate III, fig. 9.)

Francolinus bicalcaratus, Grant, Cat. Birds B. M. xxii. p. 160 (1893); Dresser, Birds Eur. ix. (Suppl.) p. 325 (1896); Sharpe, Hand-l. i. p. 24 (1899).

The eggs of the Double-spurred Francolin in the Collection are of a plain reddish-buff colour. Two specimens measure respectively: 1.75 by 1.3; 1.85 by 1.3.

2. Laid in confinement (Zool. Gardens, Zool. Society. London).

# Francolinus sharpei, Oqilvie Grant.

(Plate III. fig. 8.)

Francolinus sharpii, Grant, Cat. Birds B. M. xxii. p. 164 (1893); Sharpe, Hand-l. i. p. 25 (1899).

The two eggs of Sharpe's Francolin in the Collection are of a dark cream-colour, and measure respectively: 1.75 by 1.3; 1.7 by 1.25.

1. Laid in confinement (Zool. Gardens, London).

Zool, Society.

1. Laid in confinement (Zool. Gardens, London, 19th Dec.).

Zool. Society.

## Francolinus capensis (Gm.).

Perdix clamator, Thien. Fortyflanz. ges. Vög. p. 32, tab. vii. fig. 9 (1845-54).

Francolinus elamator, Sharpe, ed. Layard, Birds S. Africa, p. 591 (1875-84).

Francolinus capensis, Grant, Cat. Birds B. M. xxii. p. 165 (1893): Sharpe, Hand-l. i. p. 25 (1899).

The eggs of the Cape Francolin are usually of a brownish eream-colour or pale buff, occasionally with a decided purplish tinge. Those laid in the Zoological Gardens, recorded below, are of a pale purplish grey. Some specimens are said to be spotted. They measure from 1.8 to 1.95 in length, and from 1.4 to 1.5 in breadth.

1. Laid in confinement (Zool. Gardens, Zool. Society. London).

Laid in confinement (Zool, Gardens, London).

Salvin-Godman Coll.

S. Africa.

Gould Coll.

2. S. Africa (E. L. Layard).

E. L. Layard, Esq. [P.].

#### Genus PTERNISTES, Wagler.

#### Pternistes nudicollis (Bodd.).

Perdix nudicollis, Thien. Fortpflanz. ges. Vög. p. 32, tab. vii. fig. 10 (1845-54).

Pternistes nudicollis, Sharpe, ed. Layard, Birds S. Africa, p. 589 (1875–84); Grant, Cat. Birds B. M. xxii. p. 174 (1893); Sharpe, Hand-l. i. p. 25 (1899).

The single egg of the Cape Bare-throated Francolin in the Collection is a blunt oval, approaching an ellipse in form, and is reddish buff, very minutely but closely spotted all over with dark reddish brown or purple. It measures 1.55 by 1.15.

1. S. Africa.

H. F. Walter Esq. [P.].

#### Genus PERDIX, Brisson.

#### Perdix perdix (Linn.).

Perdix cinerea, Thien. Fortyflanz. ges. Vöy. p. 30, tab. vii. fig. 12 a, b (1845-54); Hewitson, Eggs of Brit. Birds, i. p. 281, pl. 1xxi. fig. i (1856); Dresser, Birds Eur. vii. p. 131 (1878); Seebohm, Brit. Birds, ii. p. 452, pl. 21 (1884); id. Eggs of Brit. Birds, p. 276, pl. 59. fig. 5 (1896).

Starna perdix, Baedeker, Eier Eur. Vöy. tab. 21. fig. 5 (1855-63).
Perdix perdix, Grant, Cat. Birds B. M. xxii. p. 185 (1893); Sharpe, Hand-l. i. p. 26 (1899).

The eggs of the Common Partridge vary in shape from regular oval to pyriform and in colour from olive-brown to brownish creameolour, but white and pale bluish-green examples are not uncommon.
They measure from 1:3 to 1:5 in length, and from 1:05 to 1:15 in breadth.

 Knockie, Inverness-shire, 17th May Seebohm Coll. (Harqitt Coll.).

8. North Berwick (Hargitt Coll.).

Sheffield (*H. Seebohm*).
 Nether Haddon, Derbyshire, June.

3. Nether Haddon, June.6. Sherwood Forest (*H. Scebohm*).

Sweden.
 Pomerania, 12th July (T. Holland).

6. Pomerania (T. II.).

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll. Salvin-Godman Coll.

Seebohm Coll.

S. O. Sahlin, Esq. [P.]. Seebohm Coll. Seebohm Coll.

## Perdix hodgsoniæ (Hodgs.).

Perdix hodgsoniæ, Hume & Marsh. Game Birds Ind. ii. p. 65 (1879); iii.
App. pl. iii. (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 438 (1890); Grant, Cat. Birds B. M. xxii. p. 193 (1893); Oates, Game Birds Ind. i. p. 191 (1898); Sharpe, Hand-l. i. p. 27 (1899).

The two eggs of Mrs. Hodgson's, or the Tibetan, Partridge in the Collection are of a regular oval shape and of a pale brownish cream-colour. They measure respectively: 1·75 by 1·17; 1·65 by 1·15.

Tibet, 12th July (Capt. Barnes).
 Ladak.
 Hume Coll.
 Col. J. Biddulph [P.].

## Genus PERDICULA, Hodgs.

The eggs of the two species of Bush-Quails of this genus are quite undistinguishable from each other. They are of an oval, pyriform, or even spheroidal shape, and of a white or creamy-white colour with a faint gloss.

# Perdicula asiatica (*Lath.*). (Plate III. fig. 1.)

Perdicula asiatica, Hume & Marsh. Game Birds Ind. ii. p. 109 (1879); Leyge, Birds Ceyl. p. 752 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 440 (1890); Grant, Cat. Birds B. M. xxii. p. 198 (1893); Oates, Game Birds Ind. i. p. 112 (1898); Sharpe, Hand-l. i. p. 28 (1899).

The eggs of the Jungle Bush-Quail measure from .96 to 1.1 in length, and from .79 to .9 in breadth.

2.	Bhore Ghât, India, 3rd Dec.	Hume Coll.
	Etawah, 21st Oct.	Hume Coll.
	Etawah.	Hume Coll.
9.	Saugor, Central Provs.	Hume Coll.

## Perdicula argoondah (Sykes).

Perdicula argoondah, Hume & Marsh, Game Birds Ind. ii, p. 117 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii, p. 441 (1890); Grant, Cat Birds B. M. xxii, p. 200 (1893); Oates, Game Birds Ind. i. p. 115 (1895); Sharpe, Hand-l. i. p. 28 (1899).

The eggs of the Rock Bush-Quail do not differ in size from the eggs of the Jungle Bush-Quail.

8.	Jhansi, C. P. India, 3rd Sept. (F. R. Blewitt).	Hume Coll.
6. 2. 4.	Jhansi, 3rd Sept. (F. R. B.). Jhansi, 4th Sept. (F. R. B.). Jhansi, 7th Sept. (F. R. B.).	Hume Coll. Hume Coll. Hume Coll.
2.	Jhansi, 18th Sept. (F. R. B.).	Hume Coll.

## Genus MICROPERDIX, Gould.

## Microperdix erythrorhyncha (Sykes).

(Plate III. fig. 4.)

Microperdix erythrorhyncha, Hume & Marsh. Game Birds Ind. ii. p. 123 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 442 (1890); Grant, Cat. Birds B. M. xxii. p. 203 (1893); Oates, Game Birds Ind. i. p. 100 (1898); Sharpe, Hand-l. i. p. 28 (1899).

The eggs of the Painted Bush-Quail are of an elongated oval

shape, smooth and glossy. They vary from a pale to a dark cream-colour. Sometimes an example presents the appearance of being speckled, but these markings are probably merely stains resulting from incubation. They measure from 1·11 to 1·35 in length, and from ·87 to ·95 in breadth.

3.	Coonoor, Nilghiris.	Hume Coll.
1.	Coonoor, 3rd March.	Hume Coll.
2.	Coonoor, 12th March.	Hume Coll.
1.	Coonoor, 9th Sept.	Hume Coll.
5.	Kotagherry, Nilghiris, 7th April	Hume Coll.
	(Miss Cockburn).	
6.	Kotagherry, 25th July (Miss	Hume Coll.
	Cockburn).	
4.	Kotagherry, 1st Sept. (Miss	Hume Coll.
	Cockburn).	
3.	Ootacamund, 6th March.	Hume Coll.
4.	Nilghiris, Dec.	Hume Coll.
1.	Peria, Wynaad (J. Darling, Junior).	Hume Coll.

#### Genus ARBORICOLA, Hodyson.

The eggs of the Hill-Partridges vary from a broad oval shape to pyriform. Some eggs are plain, others are slightly spotted.

# Arboricola torqueola (Valenc.). (Plate III. fig. 5.)

Arboricola torqueola, Hume & Marsh. Game Birds Ind. ii. p. 69 (1879); Grant, Cat. Birds B. M. xxii. p. 207 (1893); Oates, Game Birds Ind. i. p. 133 (1898); Sharpe, Hand-l. i. p. 29 (1899).

The eggs of the Common Hill-Partridge are pale greenish white, with a few very small ashy spots scattered over the shell. The four specimens in the Collection measure respectively: 1.55 by 1.23; 1.55 by 1.25; 1.52 by 1.25; 1.6 by 1.25.

4. [Himalayas.]

Old Collection.

## Arboricola atrigularis, Blyth.

Arboricola atrigularis, Hume & Marsh, Game Birds Ind. ii. p. 79 (1879);
iii. App. pl. iv. (1880); Oates ed. Hume, Nests & Egys Ind. B. iii.
p. 439 (1890); Grant, Cat. Birds B. M. xxii. p. 299 (1893); Oates,
Game Birds Ind. i. p. 145 (1898); Sharpe, Hand-l. i. p. 29 (1899).

The eggs of the White-cheeked Hill-Partridge are plain white, and measure from 1.33 to 1.43 in length, and from 1.1 to 1.13 in breadth.

Sylhet, 15th April (J. R. Cripps). Hume Coll.
 Sylhet, 18th May (J. R. C.). Hume Coll.

# Arboricola crudigularis (Swinh.). (Plate III. fig. 3.)

Oreoperdix crudigularis, Swinhoe, Ibis, 1865, p. 542, 1866, p. 401. Arboricola crudigularis, Grant, Cat. Birds B. M. xxii. p. 211 (1893); Sharpe, Hand-l. i. p. 29 (1899).

The two eggs of the Formosan Hill-Partridge in the Collection are plain white, and measure respectively: 1.54 by 1.12; 1.65 by 1.2.

2. Formosa, April (R. Swinhoe). Seebohm Coll.

#### Arboricola intermedia, Blyth.

Arboricola intermedia, Hume & Marsh. Game Birds Ind. ii. p. 85 (1879);
Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 440 (1890); Grant, Cat.
Birds B. M. xxii. p. 211 (1893); Oates, Game Birds Ind. i. p. 140 (1898); Sharpe, Hand-l. i. p. 29 (1899).

The eggs of the Arrakan Hill-Partridge are plain white, and measure from 1.46 to 1.52 in length, and from 1.13 to 1.19 in breadth.

6. Machi, Manipur, 10th May Hume Coll. (A. O. Hume).

## Arboricola rufigularis, Blyth.

Arboricola rufigularis, Hume & Marsh. Game Birds Ind. ii. p. 75 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 439 (1890); Grant, Cat. Birds B. M. xxii. p. 212 (1893); Oates, Game Birds Ind. i. p. 137 (1898); Skarpe, Hand-I. i. p. 29 (1899).

The single egg of Blyth's Hill-Partridge in the Collection is dull white, with a few very minute and indistinct ashy spots. It measures 1.5 by 1.15.

1. Pattabong, below Darjiling, 4th July (L. Mandelli).

Hume Coll.

## Genus ROLLULUS, Bonn.

# Rollulus roulroul (Scop.).

(Plate III. fig. 6.)

Rollulus roulroul, Sharpe, Ibis, 1879, p. 270; Hume & Marsh. Game Birds Ind. ii. p. 103 (1879); Grant, Cat. Birds B. M. xxii. p. 225 (1893); Oates, Game Birds Ind. i. p. 126 (1898); Sharpe, Hand-l. i. p. 30 (1899).

The eggs of the Crested Wood-Partridge are broad ovals, compressed at one end, and of a pale creamy-buff colour. The three specimens in the Collection measure respectively: 1.5 by 1.22; 1.5 by 1.17; 1.5 by 1.17.

 Laid in confinement (Zool, Gardens, London).

1. Lumbidan, N.W. Borneo.

Sir Hugh Low [C.].

## Genus MELANOPERDIX, Jerdon.

## Melanoperdix nigra (Vigors).

(Plate III. fig. 2.)

Melanoperdix nigra, Everett, List Birds Born. p. 199 (1889); Hose, Ibis, 1893, p. 423; Grant, Cut. Birds B. M. xxii, p. 228 (1893); Sharpe, Hand-l. i. p. 30 (1899).

One of the eggs of the Black Wood-Partridge in the Collection is in fragments. The other is a very broad oval with one end much compressed and pointed. It is plain white and measures 1.6 by 1.25.

2. Baram, Sarawak, Borneo, Sept. A. H. Everett, Esq. [P.].

#### Genus COTURNIX, Bonn.

The eggs of the True Quails are of a pointed oval shape. They are all handsomely marked, but the amount of gloss is very variable.

#### Coturnix coturnix (Linn.).

Perdix coturnix, Thien. Fortpflanz. ges. Vög. p. 34, tab. viii. fig. 1 a, b, fig. 2 a, b (1845-54).

Coturnix communis, Báedeker, Eier Eur. Vöy. tab. 21. fig. 6 (1855-63);
Saunders, Ibis, 1871, p. 224; Dresser, Birds Eur. vii. p. 143 (1878);
Hume & Marsh. Game Birds Ind. ii. p. 133 (1879); Seebohm, Brit. Birds, ii. p. 462, pl. 20 (1884); Oates ed. Hume. Nests & Egys Ind. B. iii. p. 443 (1890); Seebohm, Egys of Brit. Birds, p. 277, pl. 59. figs. 1, 3 (1896).

Coturnix vulgaris, Hewitson, Eygs of Brit. Birds, i. p. 284, pl. lxxii. (1856).

Turnix coturnix, Salvin, Ibis. 1859, p. 353.

Coturnix coturnix, Grant, Cat. Birds B. M. xxii. p. 231 (1893); Oates, Game Birds Ind. i. p. 80 (1898); Sharpe, Hand-l. i. p. 31 (1899).

The eggs of the Common Quail are of various shades of creamy white, yellowish buff, buff and greenish yellow, marked with deep olive-brown, reddish brown, and blackish brown. In some the markings consist of small specks and irregularly-shaped spots, with a few small blotches. In others the markings are mostly blotches of considerable size, frequently confluent, and covering quite half the surface of the shell. Numerous specimens measure from 1·1 to 1·2 in length, and from ·85 to ·95 in breadth.

Sheffield (H. Seebohm).

6. Cambridge (H. Saunders).

Wicken Fen, Cambridge (W. Farren).
 Elv, Cambridgeshire (W. F.).

5. Malaga, Spain (II. Saunders).

5. Dorpat, Baltic Provinces (Russow).

6. Pomerania (T. Holland).

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

5. Tunis.

Zana, Algeria, 15th June (O. Salvin). 5.

4. Chemora, Algeria, 1st June (O. S.). 11. Jask, Gulf of Oman, 23rd March. 6. Lahore, India, 19th April (C. H. T.

Marshall). 4. Allahabad, 26th March.

1. Allahabad. 2. N.W. Provinces Louis Fraser, Esq. [C.].

Salvin-Godman Coll. Salvin-Godman Coll.

S. Butcher, Esq. [P.]. Hume Coll.

Hume Coll.

Hume Coll. Hume Coll.

# Coturnix africana $(T, \delta, S_{\cdot})$ .

Coturnix communis, Cowan, Proc. R. Phys. Soc. Edinb. vii. p. 149 (1882).

Coturnix coturnix, Sharpe, ed. Layard, Birds S. Africa, p. 603, part. (1875-84).

Coturnix capensis, Grant, Cat. Birds B. M. xxii, p. 237 (1893). Coturnix africana, Sharpe, Hand-l. i. p. 31 (1899).

The eggs of the Cape Quail are quite similar to those of C. coturnia, both in size and colour.

S. Africa.

3. S. Africa.

8. Betsileo, Madagascar.

Gould Coll.

E. L. Layard, Esq. [P.]. Rev. W. Deans Cowan [C.].

### Coturnix japonica, T. & S.

Coturnix dactylisonans, Swinh. Ibis, 1861, pp. 260, 341. Coturnix japonica, Blak. & Pryer, Ibis, 1878, p. 226: Grant, Cat. Birds B. M. xxii, p. 239 (1893); Oates, Game Birds Ind. i. p. 87 (1898); Sharpe, Hand-l. i. p. 31 (1899).

The eggs of the Japanese Quail do not appear to differ in any respect from those of C. coturnix.

Japan (H. Pryer). 5. Talien Bay, N. China, July (R. Swinhoe).

Seebohm Coll. Seebohm Coll.

# Coturnix coromandelica (Gm.).

Coturnix coromandelica, Hume & Marsh. Game Birds Ind. ii, p. 151 (1879); iii, App. pl. iv. (1880); Oates ed, Hume, Nests & Eggs Ind, B. iii. p. 444 (1890); Grant, Cat. Birds B. M. xxii, p. 241 (1893): Oates, Game Birds Ind. i. p. 90 (1898); Sharpe, Hand-l. i. p. 31 (1899).

The eggs of the Black-breasted or Rain Quail vary excessively, the ground-colour ranging from vellowish white to reddish buff. The markings are black, purplish, olive, reddish brown or rich brown. and consist of speeks, spots and blotches. Some examples are thickly covered with fine speeks only: others are speekled and also blotched: and others again are blotched and marbled. They measure from I to 1.25 in length, and from .8 to .9 in breadth.

3. India.

6. Karachi, 8th Aug.

Purchased of Warwick. Hume Coll.

5.	Sholapur, 4th Aug. (Davidson &	Hume Coll.
	Wenden).	
11.	Sholapur, 7th Aug. (D. & W.).	Hume Coll.
2.	Sholapur, 9th Aug. (D. & W.).	Hume Coll.
7.	Sholapur, 12th Aug. (D. & W.).	Hume Coll.
7.	Sholapur, 14th Aug. $(D. \& W.)$ .	Hume Coll.
7.	Sholapur, 15th Aug. (D. & W.).	Hume Coll.
5.	Sholapur, 18th Aug. (D. & W.).	Hume Coll.
7.	Sholapur, 25th Sept. (D. & W.).	Hume Coll.
66.	Belonum (E. A. Rutler)	Hume Coll.

#### Coturnix pectoralis, Gould.

Coturnix pectoralis, Gould, Handb, Birds Austr. ii, p. 190 (1865); Campbell, Nests & Eggs Austr. Birds, p. 51 (1883); North, Nests & Eggs Austr. Birds, p. 289, pl. xvi. fig. 10 (1889); Grant, Cat. Birds B. M. xxii. p. 244 (1893); Sharpe, Hand-l. i. p. 31 (1899).

The eggs of the Australian Quail contained in the Collection can be matched by eggs of C. coturnix with regard to coloration, but they are of rather larger size. They are of two types: in one they are largely blotched, in the other they are thickly speckled and spotted.

13.	Australia.	Gould Coll.
2.	Australia (Gould Coll.).	Salvin-Godman Coll.
4.	Australia,	Sir D. Cooper [P.].
$^{2}.$	West Australia.	Gould Coll.
2.	Gippsland, Victoria.	F. A. Philbrick, Esq., Q.C.
		[P.].

#### Coturnix novæ zealandiæ (Q. & G.). (Plate IV, fig. 6.)

Coturnix novæ-zealandiæ, Potts, Tr. N. Z. Inst. ii. p. 66 (1869); iii. p. 92 (1870); v. p. 185 (1872); Buller, Birds New Zeal. 2nd ed. i. p. 225 (1888); Grant, Cat. Birds B. M. xxii, p. 245 (1893); Sharpe, Hand-l. i. p. 31 (1899).

The eggs of the extinct New Zealand Quail are of a creamy-buff colour, marked with extremely dark chocolate-brown or blackish Two examples in the Collection are marked with bold blotches combined with many speeks and spots; two others are marked with confluent blotches and spots, covering nearly the entire surface of the shell. The four specimens measure respectively: 1.3 by 1; 1.35 by 1; 1.4 by 1; 1.3 by 1.

- Plains of Port Cooper, New Zealand, Capt. Stokes, R.N. [P.]. 24th April (F. Strange).
- Gould Coll. New Zealand.

### Genus SYNŒCUS, Gould.

### Synœcus australis (Temm.).

Perdix australis, Thien. Fortpflanz, ges. Vöy. p. 35, tab. viii. fig. 3 a, b (1845-54).Synoicus australis, Macgillivray, Voy. 'Rattlesnuke,' ii. p. 358 (1852);

Gould, Handb. B. Austr. ii. p. 193 (1865); Campbell, Nests & Eggs Austr. Birds, p. 51 (1883); North, Nests & Eggs Austr. Birds, p. 289

Synecus australis, Grant, Cat. Birds B. M. xxii, p. 247 (1893); Sharpe. Hand-l. i, p. 31 (1899).

The eggs of the Australian Swamp-Quail vary much in size and colour, and no two clutches resemble each other. They are normally broad ovals, with one end much pointed. Some are white. occasionally marked with a few very tiny dark scattered dots; others are creamy white, some thickly, some sparingly, freekled and occasionally blotched with pale grey; others again are a dull pale stone-colour or greenish white, much speckled with rufous or brown. A specimen from Tasmania is of this latter character, being of a pale stone-colour with very numerous dots all over the shell, but it is fully twice the size of any other egg of this species in the Collection. The following are the average dimensions of the eggs of this bird from various localities:

Dont Prainaton

8.

1.

6.

6.

3.

Tasmania.

FOR Essington	1710 DY '0
Moreton Bay	1.3 by .95
Tasmania	
Australia (Capt. Stanley).	Voy. H.M.S. 'Rattlesnake.'
Australia.	Gould Coll.
Australia.	Gould Coll.
Baudin Island, N.W. Australia, July.	Lieut, G. Oliver [P.].
New South Wales.	Gould Coll.
Port Essington.	Gould Coll.
Port Essington.	Gould Coll,
Moreton Bay.	Gould Coll,
Tasmania.	Gould Coll.

1.15 1... .0

## Synœcus raalteni (Müll. & Schleg.). (Plate IV, fig. 1.)

Synecus raalteni, Grant, Cat. Birds B. M. xxii. p. 249 (1893); Sharpe, Hand-l. i. p. 3I (1899).

The eggs of Raalten's Swamp-Quail are broad ovals, pointed at one end and approaching the pyriform. The ground-colour is of a pale cream- or stone-colour, and this is thickly sprinkled over with minute palo rufous dots and specks, very evenly distributed over the shell. The four specimens in the Collection measure respectively: 1.08 by .9; 1.1 by .89; 1.07 by .89; 1.1 by .87.

4. Alor Island, Moluceas, 18th April. A. H. Everett, Esq. [P.].

# Genus EXCALFACTORIA, $B_D$ .

### Excalfactoria chinensis (Linn.).

Excalfactoria chinensis, Swinhoe, Ibis, 1863, p. 398; Hume & Marsh, Game Birds Ind. ii. p. 161 (1879); iii. App. pl. iii. (1880); Oates ed. Hume, Nests & Eyys Ind. B. iii. p. 448 (1890); Grant, Cut. Birds B. M. xxii, p. 250 (1893): Oates, Game Birds Ind. i, p. 95 (1898); Sharpe, Hand-l. i. p. 32 (1899).

The eggs of the Blue-breasted, or Painted, Quail are broad ovals, generally much pointed at one end, and they vary in colour from pale buff to brownish olive, spotted with very minute dots of reddish brown and purple. Some appear to be unspotted, but on close examination they will be found to be covered with extremely minute specks. The ground-colour of one specimen is pale blue. They measure from 95 to 195 in length, and from 7 to 8 in breadth.

Darjiling Terai, 15th Aug.
 Cachar (J. R. Inylis).
 Pegu, 14th July (E. W. Oates).
 Klang, Malay Peninsula, 15th March.
 Formosa (R. Swinhoe).
 Formosa, 21st Oct. (P. A. Holst).
 Formosa, 18th Aug. (P. A. H.).
 Seebohm Coll.

# Excalfactoria lineata (Scop.). (Plate IV. fig. 2.)

Excalfactoria australis, Gould, Handb. Birds Austr. ii. p. 197 (1865); Campbell, Nests & Eggs Austr. Birds, p. 51 (1883); North, Nests & Eggs Austr. Birds, p. 291 (1889).

Excalfactoria chinensis, Sharpe, P. Z. S. 1879, p. 350.

Excalfactoria lineata, *Grant*, *Cat. Birds B. M.* xxii. p. 253 (1893); *Sharpe*, *Hand-l*, i. p. 32 (1899).

The eggs of the Island Painted Quail resemble those of *E. chinensis* in texture, gloss, shape and size, but differ markedly from them in colour. They are of a light green, pale brown, stone-colour or olive-buff, thickly spotted all over with blackish brown or dark chocolate-brown, the spots being clear and distinct and of small size.

10. New South Wales.10. Labuan Island, N.W. Borneo.Gould Coll.Sir Hugh Low [C.].

#### Genus BAMBUSICOLA, Gould.

The eggs of the Bamboo-Partridges are of a broad oval, or, occasionally, of an elliptical form. They possess a fair amount of gloss.

# Bambusicola fytchei, Anders. (Plate IV, fig. 8.)

Bambusicola hopkinsoni, Godwin-Austen, J. A. S. B. xliii. pt. 2, p. 172 (1874).

Bambusicola fytchii, Hume & Marsh. Game Birds Ind. ii. p. 97 (1879); Grant, Cat. Birds B. M. xxii. p. 257 (1893); Oates, Game Birds Ind. i. p. 210 (1898).

Bambusicola fytchei, Sharpe, Hand-l. i. p. 32 (1899).

The eggs of Fytche's Bamboo-Partridge are of a rich creamcolour, and measure from 1.4 to 1.55 in length, and from 1.1 to 1.15 in breadth.

- 4. Kohima, Naga Hills (Capt. II. Col. II. II. Godwin-Austen Stevens).
- 1. Southern Shan States (A. II. Oates Coll. Hildebrand).

# Bambusicola thoracica (Temm.). (Plate 1V. fig. 5.)

Bambusicola thoracica, Swinkoe, Ibis, 1863, p. 400; Grant, Cat. Birds B. M. xxii, p. 258 (1893); Sharpe, Hand-l. i. p. 32 (1899).

B. M. xxn. p. 258 (1893); Sharpe, Hand-t. i. p. 32 (1899).

The eggs of the Chinese Bamboo-Partridge are cream-coloured, with some very pale grey shell-markings and some minute rufous

dots. The three specimens in the Collection measure respectively: 1·27 by 1·08; 1·32 by 1·05; 1·35 by 1·08.

3. Amoy, China (R. Swinhoe).

Seebohm Coll.

#### Bambusicola sonorivox, Gould.

(Plate IV, fig. 3.)

Bambusicola sonorivox, Swinhoe, Ibis, 1863, p. 399; Grant, Cut. Birds B. M. xxii, p. 259 (1893); Sharpe, Hand-l. i. p. 32 (1899).

The eggs of the Formosan Bamboo-Partridge are of various shades of cream-colour. Some are plain, but the majority are freekled with very minute rufous dots which are sometimes evenly spread over the shell and sometimes collected at one end. Some specimens are much stained with yellow. They measure from 1·25 to 1·45 in length, and from 1 to 1·1 in breadth.

Formosa (R. Swinhoe).
 Formosa, 19th April (P. A. Holst).
 Formosa, 29th April (P. A. H.).
 Formosa, 18th May (P. A. H.).
 Formosa, 7th Aug. (P. A. H.).
 Seebohm Coll.
 Seebohm Coll.
 Seebohm Coll.

# Genus GALLIPERDIX, Blyth.

The eggs of the Spur-Fowl are glossy and of a regular oval form. They vary from cream-colour to a warm reddish buff.

# Galliperdix spadicea (Gm.). (Plate IV. fig. 4.)

Galloperdix spadiceus, Hume & Marsh. Game Birds Ind. i. p. 247 (1879);
Oates ed. Hume, Nests & Egys Ind. B. iii. p. 423 (1890); Grant,
Cat. Birds B. M. xxii. p. 261 (1893); Oates, Game Birds Ind. i.
p. 215 (1898).

Galliperdix spadicea, Sharpe, Hand-l. i. p. 32 (1899).

The eggs of the Red Spur-Fowl measure from 1.55 to 1.85 in length, and from 1.15 to 1.3 in breadth.

Mount Abu, 15th April (G. King).
 Kotagherry, Nilghiris, 10th Feb.
 Hume Coll.
 Hume Coll.

(Miss Cockburn).

1. Kotagherry, 3rd March (Miss Hume Coll. Cockburn).

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2.	Kotagherry, 22nd March (Miss	Hume Coll.
2.	Cockburn). Kotagherry, 7th April (Miss	Hume Coll.
2.	Cockburn). Kullar, Nilghiris, 5th Feb.	Hume Coll.
2.	Coonoor, Nilghiris, 15th May.	Hume Coll.
2.	Nilghiris, May.	Hume Coll.
2.	Tripatore, Feb.	Hume Coll.
1.	S. India.	Hume Coll.

# Galliperdix lunulata (Valenc.). (Plate IV. fig. 9.)

Galloperdix lunulatus, Hume & Marsh. Game Birds Ind. i. p. 255 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 425 (1890); Grant, Cat. Birds B. M. xxii. p. 203 (1893); Oates, Game Birds Ind. i. p. 220 (1898).

Galliperdix lunulata, Sharpe, Hand-l. i. p. 32 (1899).

The eggs of the Painted Spur-Fowl do not differ from those of G. spadicea except in being smaller. The four examples in the Collection measure respectively: 1.67 by 1.12; 1.62 by 1.1; 1.6 by 1.1; 1.55 by 1.15.

Raipur, C. Provs. (F. R. Blewitt).
 Chanda, 9th April (R. Thompson).
 Hume Coll.
 Hume Coll.

#### Genus ITHAGENES, Wagl.

# Ithagenes geoffroyi, Verr. (Plate IV. fig. 7.)

1thagenes geoffroyi, Grant, Cat. Birds B. M. xxii. p. 269 (1893); Sharpe, Hand-l. i. p. 33 (1899).

The eggs of Geoffroy's Blood-Pheasant are of a narrow and clongated oval form, smooth, glossy and of remarkable beauty. The ground-colour is of a pale reddish buff and the whole shell is blotched with very deep reddish brown. They measure from 1.85 to 2.05 in length, and from 1.25 to 1.3 in breadth.

 Ta-tsien-lu, West China (A. E. Seebohm Coll. Pratt).

### Genus TRAGOPAN, Cuvier.

### Tragopan satyra (Linn.).

Satyra (Tragopan) sahprus, Thien. Fortpflanz. ges. Vög. p. 52, tab. xii. fig. 4 (1845-54).

Ceriornis satyra, Hume & Marsh. Game Birds Ind. i. p. 137 (1879); Sclater, P. Z. S. 1879, p. 117, pl. viii. fig. 4; Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 409 (1890).

Tragopan satyra, Grant, Cat. Birds B. M. xxii. p. 271 (1893); Oates, Game Birds Ind. i. p. 241 (1898); Sharpe, Hand-l. i. p. 33 (1899).

The sole egg of the Crimson Horned Pheasant in the Collection is of a regular oval shape, without gloss and of a dull white, closely freckled all over with pale lilac. It measures 2.4 by 1.8. Several

examples measured by Mr. Hume, which are no longer in his Collection, varied from 2.54 to 2.62 in length, and from 1.8 to 1.84 in breadth.

Laid in confinement (Zool. Gardens, London).

#### Tragopan melanocephalus (J. E. Gray).

Ceriornis melanocephalus, Hume & Marsh. Game Birds Ind. iii., App. pl. iii. (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 410 (1890).

Tragopan melanocephalns, Grant, Cat. Birds B. M. xxii, p. 273 (1893); Oates, Game Birds Ind. i. p. 245 (1898); Sharpe, Hand-l. i. p. 33 (1899).

The eggs of the Western Horned Pheasant are elongated ovals, without gloss and of a dull yellowish buff, minutely spotted all over with yellowish brown. They measure from 2.4 to 2.55 in length, and from 1.68 to 1.72 in breadth.

4. Hazara, N.W. India, 25th May Hume Coll. (Captain Lautour).

#### Tragopan temmincki (J. E. Gray).

Ceriornis temmineki, Sclater, P. Z. S. 1879, p. 117, pl. viii. fig. 3. Tragopan temmineki, Grant, Cat. Birds B. M. xxii. p. 275 (1890): Oates, Game Birds Ind. i. p. 251 (1898); Sharpe, Hand-l. i. p. 33 (1899).

The eggs of Temminck's Horned Pheasant vary from a narrow to a broad oval shape and have very little gloss. Those of the clutch recorded below from China, six in number, are of a pinkish cream-colour, very closely speckled all over with dark reddish brown; those laid in the Zoological Gardens are of a rufous-buff colour, thickly speckled with dull rufous-brown. They measure from 2 to 2:25 in length, and from 1:45 to 1:65 in breadth.

4. Laid in confinement (Zool. Gardens, London). Zool. Society.

6. Ta-tsien-lu, W. China (A. E. Pratt). Seebohm Coll.

# Tragopan blythi (Jerd.). (Plate V. fig. 5.)

Ceriornis blythi, Hume & Marsh. Game Birds Ind. i. p. 151 (1879); Sclater, P. Z. S. 1884, p. 477.

Tragopan blythi, Grant, Cat. Birds B. M. xxii. p. 276 (1893); Oates, Game Birds Ind. i. p. 254 (1898); Sharpe, Hand-l. i. p. 33 (1899).

The sole egg of the Grey-bellied, or Blyth's, Horned Pheasant in the Collection closely resembles those eggs of *T. temmincki* which were laid in the Gardens of the Zoological Society and are described above, but is rather paler. It was laid in confinement, and measures 2·4 by 1·75.

 Sadiya, Assam, July (Major W. P. L. Sclater, Esq. [P.]. Brydon). Himalayas.

#### Genus LOPHOPHORUS, Temm.

#### Lophophorus impeyanus (Lath.).

Satyra impeyana, Thien. Fortpflanz. ges. Vög. p. 52, tab. xii. fig. 3 (1845-54).

Lophophorus impeyanus, Mitchell, P. Z. S. 1858, p. 544, Aves, pl. cxlix.
fig. 5; Hume & Marsh. Game Birds Ind. i. p. 125 (1879); Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 407 (1890); Oates, Game Birds Ind. i. p. 262 (1898); Sharpe, Hand-l. i. p. 33 (1899).
Lophophorus refulgens, Grant, Cat. Birds B. M. xxii. p. 278 (1893).

The eggs of the Monal Pheasant are of a regular oval shape and they possess a fair amount of gloss. They are of a cream-colour or buffy white, thickly freekled and marked all over with very dark reddish brown. On many specimens the markings are larger and more frequent on the central portion of the shell than elsewhere. They measure from 2.4 to 2.7 in length, and from 1.7 to 1.9 in breadth.

The eggs of this species cannot be separated with any certainty from those of *Meleagris gallopavo* (p. 64).

Gould Coll.

6,	Himalayas.	Hume Coll.
2.	N.W. Himalayas, 19th June.	Hume Coll.
	Hazara, May.	Hume Coll.
2.	Sookee, 9500 feet. 1st June.	Hume Coll.
1.	Jallah, 8500 feet, 23rd May.	Hume Coll.
1.	Mussoorie.	Hume Coll.
4.	Laid in confinement (Zool, Gar-	Salvin-Godman Coll.
	dens, London).	

# Genus LOPHURA, Fleming.

# Lophura rufa (Raffl.).

(Plate V. fig. 3.)

Euplocamus vieilloti, Hume & Marsh. Game Birds Ind. i. p. 213 (1879).
Lophura rufa, Grant, Cat. Birds B. M. xxii. p. 286 (1893); Oates, Game Birds Ind. i. p. 379 (1898); Sharpe, Hand-l. i. p. 34 (1899).

The egg of the Malayan Crested, or Vieillot's, Fire-back Pheasant in the Collection is of a regular oval form, fairly glossy and of a pale creamy-buff colour. It measures 2.2 by 1.6.

 Laid in confinement at Singapore, Hume Coll. July.

# Lophura nobilis (Sclater). (Plate V. fig. 1.)

Euplocamus ignitus, Sharpe, Ibis. 1879, p. 270. Lophura ignita, Grant, Cat. Birds B. M. xxii. p. 288 (1893). Lophura nobilis, Sharpe, Hand-l. i. p. 34 (1899).

The eggs of the Bornean Crested Fire-back Pheasant are of a very rounded oval form. They are of a pale cream-colour and measure from 1.95 to 2.15 in length, and from 1.5 to 1.65 in breadth.

Laid in confinement (Zool, Gardens, London, 6th July).

Laid in confinement (Zool, Gar-•) dens, London, 6th Aug.).

Mengalong River, N.W. Borneo.

1. Of uncertain origin,

1. Of uncertain origin. Gould Coll.

Salvin-Godman Coll.

Sir Hugh Low [C.].

Gould Coll.

H. F. Walter, Esq. [P.].

## Genus LOBIOPHASIS, Sharpe.

### Lobiophasis bulweri, Sharpe. (Plate V. fig. 2.)

Lobiophasis bulweri, Everett, List Birds Born. p. 198 (1889); Grant, Cat. Birds B. M. xxii, p. 292 (1893); Sharpe, Hand-l. i. p. 35 (1899).

The egg of Bulwer's Wattled Pheasant in the Collection is a regular broad oval and of a pale pinkish cream-colour. It measures 2 inches by 1.55.

Baram, Sarawak, Borneo, Sept. A. H. Everett, Esq. [P.].

#### Genus CROSSOPTILUM, Hodgson.

## Crossoptilum tibetanum (Hodgs.). (Plate V. fig. 4.)

Crossoptilum tibetanum, Hume & Marsh. Game Birds Ind. i. p. 115 (1879); Sharpe, Hand-l. i. p. 35 (1899). Crossoptilon tibetanum, Grant, Cat. Birds B. M. xxii, p. 293 (1893).

The eggs of Hodgson's Eared Pheasant are regular broad ovals, very glossy and smooth. They are of a pale stone, pale buff or reddish-buff colour. Some are plain, others are sprinkled, chiefly at the larger end, with specks of reddish brown. They measure from 2.3 to 2.45 in length, and from 1.7 to 1.75 in breadth.

4. Ta-tsien-lu, W. China (A. E. Pratt). Seebohm Coll.

3. Ta-tsien-lu (A. E. P.). 5. Ta-tsien-lu (A. E. P.). Seebolim Coll.

Seebohm Coll.

### Crossoptilum manchuricum, Swinh.

Crossoptilon mantchurieum, Sclater, P. Z. S. 1879, p. 118, pl. viii. fig. 5; Grant, Cat. Birds B. M. xxii, p. 294 (1893).

Crossoptilum manchuricum, Sharpe, Hand-l. i. p. 35 (1899).

The eggs of the Manchurian Eared Pheasant in the Collection are of a regular oval form, with little gloss, and of a pale stone-colour. They measure respectively: 2.1 by 1.52; 2.18 by 1.53; 2.02 by 1.51.

3. Laid in confinement (Zool, Gar-Zool. Society. dens, London).

### Genus GENNÆUS, Wagler.

The eggs of the Kalij and Silver Pheasants are regular ovals, smooth, rather glossy and perfectly unmarked.

### Gennæus albicristatus (Vig.).

Gallophasis albocristatus, Mitchell, P. Z. S. 1858, p. 544, Aves, pl. exlix. fig. 3.

Euplocamus albicristatus, Hume & Marsh. Game Birds Ind. i. p. 177 (1879): Ontes ed. Hume, Nests & Eggs Ind. B. iii. p. 413 (1890). Gennæus albocristatus, Grant, Cut. Birds B. M. xxii. p. 298 (1893). Gennæus albicristatus, Ontes, Game Birds Ind. i. p. 324 (1898): Sharpe,

Hand-l. i. p. 35 (1899).

The eggs of the White-crested Kalij Pheasant vary from ereamcolour to reddish buff, and measure from 1.85 to 2.05 in length, and from 1.25 to 1.55 in breadth.

4.	[N.W. Himalayas.]	Gould Coll.
	Laid in confinement (Zool, Gar-	Salvin-Godman Coll.
a	dens, London).	Hume Coll.
2.	Dhurumsala, N.W. Himalayas, 11th May.	nume Con.
Ι.	Dhurumsala, 26th May.	Hume Coll.
2.	Kulu, 1st May.	Hume Coll.
10.	Kotegurh, 24th April.	Hume Coll.
2.	Kotegurh, 26th April.	Hume Coll.
2.	Kotegurh, May.	Hume Coll.
2. 2. 7.	Kotegurh, 22nd May.	Hume Coll.
10.	Kotegurh, 22nd May.	Hume Coll.
5.	Kotegurh, 15th June.	Hume Coll.
4.	Kotegurh, 18th June.	Hume Coll.
1.	Gurhwal, 20th May (F. Wilson).	Hume Coll.
8.	Gurhwal, June (F. W.).	Hume Coll.
1.	Kumaon (Col. Ramsay).	Hume Coll.

## Gennæus melanonotus (Blyth).

Gallophasis melanotus, Mitchell, P. Z. S. 1858, p. 544. Aves, pl. cxlix. fig. 2. Euplocamus melanonotus, Hume & Marsh, Game Birds Ind. i. p. 191 (1879); Ontes ed. Hume, Nests & Eggs Ind. B. iii. p. 415 (1890). Genmæus muthura, Grant, Cat. Birds B. M. xxii. p. 301 (1893). Genmæus melanonotus, Ontes, Game Birds Ind. i. p. 331 (1898); Sharpe, Hand-l. i. p. 35 (1899).

The eggs of the Black-backed Kalij Pheasant cannot be distinguished by any character from those of G. alhicristatus.

3.	Laid in confinement (Zool, Gar-	Salvin-Godman Coll.
	dens, London).	
3.	[E. Himalayas.]	Gould Coll.
2.	Darjiling, 2000 feet, 23rd March.	Hume Coll.
1.	Darjiling, 30th March.	Hume Coll.
1.	Darjiling, 9th May.	Hume Coll.
1.	Darjiling, July.	Hume Coll.
3.	Sikhim, 4th April.	Hume Coll.

#### Gennæus horsfieldi (Gray).

Gallophasis horsfieldi, Mitchell, P. Z. S. 1858, p. 544, Aves, pl. cxlix.

Euplocamus horsfieldi, Hume & Marsh. Game Birds Ind. i. p. 197 (1879): Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 416 (1890).

Gennæus horsfieldi, Grant, Cat. Birds B. M. xxii. p. 302 (1893); Oates. Game Birds Ind. i. p. 334 (1898); Sharpe, Hand-l. i. p. 35 (1899).

The eggs of the Black-breasted Kalij Pheasant vary from pinkish buff to reddish cream-colour. Many specimens are thickly speckled with white calcareous matter. They measure from 1.8 to 2.05 in length, and from 1.4 to 1.5 in breadth.

[Assam.]
 Khowang, Dibrughur, 22nd March
 (J. R. Cripps).
 Sylhet, 10th March.
 Machi, Manipur, 3rd May (A. O.

Gould Coll.
Hume Coll.
Hume Coll.
Hume Coll.

Hume).

# Gennæus lineatus (Vig.).

(Plate VI. fig. 5.)

Euplocamus lineatus, Hume & Marsh, Game Birds Ind. i. p. 205 (1897):
Oates ed. Hume, Nests & Egys Ind. B. iii, p. 416 (1890).
Gennæus lineatus, Grant, Cat. Birds B. M. xxii, p. 304 (1893); Oates,

Game Birds Ind. i. p. 351 (1898); Sharpe, Hand-l. i. p. 36 (1899).

The eggs of the Lineated Silver Pheasant are of a pale reddish-buff colour, and the pores are rather conspicuous, owing to their being somewhat paler than the other parts of the shell. They measure from 1.75 to 1.95 in length, and from 1.4 to 1.5 in breadth.

 Pegu Hills, 17th April (E. W. Outes). Hume Coll.
 Yonzalin River, Tenasserim, Hume Coll. 16th March (C. T. Bingham).

### Gennæus nycthemerus (Linn.).

Phasianus nyethemerus, Thien. Fortpflanz. ges. Võg. p. 19, tab. vii. fig. 4 (1845-54).

Gennaeus nycthemerus, Baedeker, Eier Eur. Vög. tab. 65. fig. 5 (1855-63); Grant, Cat. Birds B. M. xxii. p. 307 (1893); Sharpe, Hand-l. i. p. 36 (1899).

The eggs of the Chinese Silver Pheasant vary in colour from pale buff to reddish buff. They measure from 1.9 to 2.15 in length, and from 1.5 to 1.6 in breadth.

[China.] Gould Coll.
 Laid in confinement (Zool. Gardens, London).

Gould Coll.
Zool. Society.

3. Laid in confinement (Zool. Gar-Salvin-Godman Coll. dens, London).

#### Gennæus swinhoei (Gould).

Euplocamus swinhoii, Swinhoe, Ibis, 1866, p. 405.
Gennæus swinhoei, Grant, Cat. Birds B. M. xxii. p. 309 (1893); Sharpe,
Hand-l. i. p. 36 (1899).

The eggs of Swinhoe's Silver Pheasant vary from pale reddish buff to cream-colour. They measure from 1.9 to 2.15 in length, and from 1.45 to 1.53 in breadth \*.

2. Laid in confinement (Zool, Gar-Zool, Society, dens, London).

4. Amoy, China (R. Swinhoe). Seebohm Coll.

### Genus PUCRASIA, Gray.

#### Pucrasia macrolopha (Less.).

Satyra macrolopha, Thien. Fortpflanz. ges. Vög. p. 53, tab. xii. fig. 5 (1845-54).

Pucrasia macrolopha, Hume & Marsh. Game Birds Ind. i. p. 159 (1879);
 Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 411 (1890);
 Grant, Cat. Birds B. M. xxii. p. 311 (1893);
 Oates, Game Birds Ind. i. p. 313 (1898);
 Sharpe, Hand-l. i. p. 36 (1899).

The eggs of the Common Koklass Pheasant are of a regular oval shape and fairly glossy. The ground-colour is creamy buff. The markings are of a very deep reddish and chocolate-brown, almost black in their intensity. Some specimens are merely speekled, others are spotted and blotched, and the markings in both cases are very regularly distributed over the shell. The eggs measure from 1.85 to 2.3 in length, and from 1.4 to 1.55 in breadth.

11.	Himalavas.	Hume Coll.
	Dhurumsala, N.W. Himalayas,	Hume Coll.
	April.	
6.	Kotegurh, 10th April.	Hume Coll.
4.	Kotegurh, 27th April.	Hume Coll.
6.	Kotegurh, 28th May.	Hume Coll.
1.	Mussoorie.	Hume Coll.
3.	Valley of the Bhagarutti,	Hume Coll.
	13,000 feet (W. E. Brooks).	
$\frac{2}{2}$ .	Valley of the Bhagarutti, 7500 feet,	Hume Coll.
	18th May (W. E. B.).	
1.	Kumaon (Col. Ramsay).	Hume Coll.

#### Genus CATREUS, Cabanis.

### Catreus wallichi (Hardw.).

Catreus wallichi, Mitchell. P. Z. S. 1858, p. 544, Ares, pl. cxlix. fig. 4; Grant, Cat. Birds B. M. xxii. p. 317 (1893); Oates, Game Birds Ind. i. p. 293 (1898); Sharpe, Hand-l. i. p. 37 (1899).

Phasianus wallichi, Hume & Marsh. Game Birds Ind. i. p. 169 (1879) Outes ed. Hume, Nests & Eygs Ind. B. iii. p. 412 (1890).

The eggs of the Cheer Pheasant are of a broad oval shape and

<sup>\*</sup> The dimensions of an egg of this species recorded by Swinhoe are 2.4 by 1.7.

slightly glossy. They vary from cream-colour to pale stone-colour. Many are quite plain; a few exhibit some reddish-brown dots at the larger end. They measure from 2.05 to 2.25 in length, and from 1.5 to 1.55 in breadth.

4. Himalayas.

Hume Coll.

Himalayas.
 Laid in confinement (Zool, Gardens, London).

Salvin-Godman Coll.

#### Genus PHASIANUS, Linn.

The eggs of the True Pheasants vary from a short broad oval form to pyriform, and they are smooth and glossy. They appear to be always unmarked.

#### Phasianus colchicus, Linn.

Phasianus colchicus, Thien. Fortpflanz. ges. Vög. p. 20, tab. vii. fig. 3 (1845-54); Bacdeker, Eier Eur. Vög. tab. 65. fig. 1 (1855-63); Hewitson, Eggs of Brit. Eirds, i. p. 276, pl. lxviii. (1856); Dresser, Birds Eur. vii. p. 85 (1879); Seebohm, Brit. Birds, ii. p. 445, pl. 21 (1884); Grant. Cat. Birds E. M. xxii. p. 320 (1893); Seebohm, Eggs of Brit. Birds, p. 275, pl. 59. fig. 9 (1896); Sharpe, Hand-l. i. p. 37 (1899).

The majority of the eggs of the Common Pheasant are of an olive-brown colour, but eggs are frequently met with which are of a greenish blue, greenish white, pale stone-colour, clear brown or brownish eream-colour. They measure from 1.7 to 1.9 in length, and from 1.35 to 1.45 in breadth.

Scotland (Hargitt Coll.).
 Drumnadrochit, Inverness (A.

Seebohm Coll. Seebohm Coll.

Lawler: Hargitt Coll.).
4. North Berwick (Hargitt Coll.).
8. Chathill, Northumberland (E. U.

Seebohm Coll. Seebohm Coll.

Seebohm).
6. Haddon Hall, Derbyshire.

Salvin-Godman Coll.

### Phasianus torquatus, Gm.

Phasianus torquatus, *Thien. Fortpflunz. ges Vög.* p. 21, tab. vii. fig. 2 (1845–54); *Baedeker, Eier Eur. Vög.* tab. 65, fig. 3 (1855–63); *Grant, Cat. Birds B. M.* xxii. p. 331 (1893); *Sharpe, Hand-l.* i. p. 37 (1899).

The eggs of the Chinese Ring-necked Pheasant are subject to much variation, the prevailing colour being, however, olive of various shades. Other tints met with are pale stone-colour, greenish white and buff. They measure from 1.6 to 1.8 in length, and from 1.3 to 1.4 in breadth.

2. Laid in confinement. Gould Coll.

Shanghai, China (R. Swinhoe).
 Tsusima, Japan, 24th May (P. A. Seebohm Coll.

Holst). 12. Tsusima, 31st May (P. A. II.).

Seebohm Coll.

### Phasianus versicolor, V.

(Plate V1. fig. 1.)

Phasianus versicolor, Seebohm, Birds Japan. Emp. p. 370 (1890); Grant. Cat. Birds B. M. xxii, p. 334 (1893); Sharpe, Hand-l. i. p. 38 (1899).

The eggs of the Japanese Pheasant are very variable in colour, ranging from stone-colour to dark brown. They measure from 1.5 to 1.7 in length, and from 1.2 to 1.4 in breadth.

8. Laid in confinement.

Gould Coll.

Laid in confinement (Zool. Gardens, London).

Gould Coll.

3. Japan (H. Pryer).

Seebohm Coll.

### Phasianus scintillans, Gould.

(Plate VI, fig. 3.)

Phasianus (Graphophasianus) scintillans, Gould, Ann. & Mag. N. H. (3) xvii, p. 150 (1866).

Phasianus scintillans, Seebohm, Birds Japan, Emp. p. 371 (1890); Grant, Cat. Birds B. M. xxii, p. 337 (1893); Sharpe, Hand-l. i. p. 38 (1899).

The eggs of the Hondo Copper Pheasant are cream-coloured. A few eggs in the Collection which appear to have been addled or imperfectly cleaned have a distinct purple tinge. They measure from 1.8 to 1.9 in length, and from 1.25 to 1.35 in breadth.

7. Japan (H. Pryer).

Seebohm Coll.

#### Genus CALOPHASIS, Elliot.

# Calophasis ellioti (Swinh.). (Plate V1. fig. 2.)

(Plate VI. ng. 2.)

Phasianus ellioti, Grant, Cat. Birds B. M. xxii. p. 335 (1893). Calophasis ellioti, Sharpe, Hand-l. i. p. 38 (1899).

The eggs of Elliot's Pheasant are of a broad oval form and have a considerable amount of gloss. Of the four specimens in the Collection, three are cream-coloured: the fourth is rather paler than the others and has a greenish tinge. They measure from 1.65 to 1.72 in length, and from 1.25 to 1.35 in breadth.

4. Laid in confinement (Zool. Gardens, London).

Zool, Society.

# Genus CHRYSOLOPHUS, J. E. Gray.

The eggs of the Golden Pheasants are smooth, glossy and generally of a broad oval form. A few are slightly pyriform.

### Chrysolophus pictus (Linn.).

Phasianus pictus, Thien. Fortpflanz. ges. Vög. p. 20, tab. vii. fig. 1 (1845-54).
Thaumalea picta, Baedeker, Eier Eur. Vög. tab. 65, fig. 4 (1855-63).

Chrysolophus pictus, Grunt, Cat. Birds B. M. xxii, p. 339 (1893); Sharpe, Hand-I. i, p. 38 (1899).

The eggs of the Golden Pheasant vary from a pale buff colour to cream-colour. They measure from 1.7 to 1.8 in length, and from 1.27 to 1.4 in breadth.

2. Laid in confinement.

Gould Coll.

 Laid in confinement (Zool, Gardens, London). Salvin-Godman Coll.

# Chrysolophus amherstiæ (Leadh.).

(Plate VI. fig. 6.)

Chrysolophus amherstiæ, Grant, Cat. Birds B. M. xxii. p. 342 (1893); Sharpe, Hand-l. i. p. 38 (1899); Oates, Game Birds Ind. ii. p. 497 (1899).

The eggs of Lady Amherst's Pheasant are of a rich cream-colour, and measure from 1.7 to 1.9 in length, and from 1.36 to 1.5 in breadth.

Laid in confinement (Zool, Gardens, London).

Zool. Society.

8. Laid in confinement.

Col. E. A. Butler [P.].

#### Genus GALLUS, Briss.

#### Gallus gallus (Linn.).

Phasianus bankiva, Thien. Fortpflanz. ges. Vög. p. 17, tab. vi. fig. 5 (1845-54).

Gallus bankiya, Baedeker, Eier Eur. Vög. tab. 65, fig. 6 (1855–63); Steere, List Birds & Mamm. Philip. p. 25 (1890).

Gallus ferrugineus, Hume & Marsh. Game Birds Ind. i. p. 217 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 417 (1890).

Gallus gallus, Grant, Cat. Birds B. M. xxii, p. 344 (1893); Oates, Game Birds Ind. i. p. 366 (1898); Sharpe, Hand-l. i. p. 39 (1899).

The eggs of the Red Jungle-Fowl are of a regular oval form, smooth and with a considerable amount of gloss. They vary from cream-colour to pinkish buff. There is a great variation in the size of the eggs, which measure from 1.6 to 2.1 in length, and from 1.27 to 1.55 in breadth.

2.	Nahun, Iudia, 10th May.	Hume Coll.
1.	Ramnugger (Col. Ramsay).	Hume Coll.
4.	Kumaon Bhabur.	Hume Coll.
1.	Sikhim, 3000 feet, 30th March.	Hume Coll.
3.	Sikhim Terai, 10th June.	Hume Coll.
3.	Sikhim Terai, 26th June.	Hume Coll.
6.	Sadiya, Assam, 1st May.	Hume Coll.
3.	Thayetmyo, Burma, 24th May.	Hume Coll.
1.	Pegu, Aug. (E. W. Oates).	Oates Coll.
4.	Sinzaway, Tenasserim, 13th April	Hume Coll.

(C. T. Bingham). 1. Tenasserim, 12th March (C. T. B.).

Hume Coll.

Philippine Islands.

Steere Exped.

#### Gallus lafayettei, Less.

(Plate VII. fig. 8.)

Gallus stanleyi (nec J. E. Gray), Layard, Ann. & Mag. N. H. (2) xiv p. 62 (1854).

Gallus lafavetti, Hume & Marsh. Game Birds Ind. i. p. 241 (1879);
Legge, Birds Ceyl. p. 736, pl. —. fig. 10 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 422 (1890).

Gallus lafayetti, Grant, Cat. Birds B. M. xxii. p. 348 (1893); Oates, Game Birds Ind. i. p. 375 (1898).

Gallus lafayettei, Sharpe, Hand-l. i. p. 39 (1899).

The eggs of the Ceylon Jungle-Fowl are regular ovals, smooth and glossy. They vary from pale reddish buff to cream-colour, and they are minutely and closely speckled with reddish brown. Three specimens measure respectively: 1.7 by 1.3; 1.85 by 1.4.

Ceylon (E. L. Layard).
 Ceylon.
 Ceylon, 3rd June.
 Salvin-Godman Coll.
 E. L. Layard, Esq. [P.].
 Hume Coll.

The Collection contains two eggs of the hybrid *G. temmineki*, received from Gould. They are of a reddish-buff colour and measure 1.8 by 1.45. They are said to have been received from India.

#### Gallus sonnerati, Temm.

Gallus sonnerati, Hume & Marsh. Game Birds Ind. i. p. 231 (1879);
 Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 420 (1890);
 Grant, Cat. Birds B. M. xxii. p. 350 (1893);
 Oates, Game Birds Ind. i. p. 371 (1898);
 Sharpe, Hand-l. i. p. 39 (1899).

The eggs of the Grey Jungle-Fowl are of a regular oval form, glossy and smooth. They vary from cream-colour to a rather rich reddish buff. The majority are plain; a few are thickly speckled with brownish red. In the eggs of this species the pores are very conspicuous. The dimensions vary from 1.7 to 2.05 in length, and from 1.2 to 1.5 in breadth.

1.	Aboo, N.W. India, 14th April	nume con.
	(G. King).	
1.	Aboo, $25$ th April $(G, K_{\cdot})$ .	Hume Coll.
1.	Aboo, 24th May (G. K.).	Hume Coll.
2.	Nilghiris, 20th May (Miss Cock-	Hume Coll.
	burn).	
3.	Kotagherry, Nilghiris, 14th April	Hume Coll.
	(Miss Cockburn).	
1.	Kotagherry, 22nd April (Miss	Hume Coll.
	Cockburn).	
2.	Kotagherry, 5th May (Miss	Hume Coll.
	Cockburn).	
1.	Kotagherry, 3rd Oct. (Miss Cock-	Hume Coll.
	burn).	
٠ī.	Travancore, 2nd March.	Hume Coll.
3.	Travancore, 16th March.	Hume Coll.

Aboo N.W. India 14th April Humo Coll

### Genus ARGUSIANUS, Rafin.

#### Argusianus argus (Linn.).

Gallus giganteus, Baedeker, Eier Eur. Vöy. tab. 65. fig. 7. (1855-63).
Argus giganteus, Sclater, P. Z. S. 1879, p. 115, pl. viii. fig. 1; Hume & Marsh, Game Birds Ind. i. p. 99 (1879).

Argusianus argus, Grant, Cat. Birds B. M. xxii. p. 363 (1893); Octes, Game Birds Ind. i. p. 286 (1898); Sharpe, Hand-l. i. p. 40 (1899).

The two eggs of the Argus Pheasant are blunt ovals, smooth and fairly glossy. They are pale reddish buff, freekled with pale reddish brown. In one specimen the freekles are coarse and distributed all over the shell; in the other they are minute and clustered round the two ends.

The dimensions of two examples are respectively: 2.55 by 1.85: 2.6 by 1.9\*.

Laid in confinement (Zool. Gardens, Loudon, June).

# Argusianus grayi (Elliot). (Plate VI. fig. 4.)

Argusianus grayi, Sharpe, Ibis, 1879, p. 267; Grant, Cat. Birds B. M. xxii. p. 365 (1893); Sharpe, Hand-l. i. p. 40 (1899).

The eggs of Gray's Argus Pheasant in the Collection are of a very regular oval form. Two are glossless and eream-coloured, very minutely stippled all over with pale rafons. A third specimen has a considerable amount of gloss and is of a pale ereamy-yellow colour, with numerous small yellow smears on the shell, which are probably caused by incubation. Three examples measure respectively: 2.65 by 1.82; 2.6 by 1.8; 2.43 by 1.68.

Mengalong River, Borneo.
 Baram, Sarawak, 12th Aug.

Sir Hugh Low [C.]. Charles Hose, Esq. [P.].

#### Genus PAVO, Linn.

# Pavo cristatus, Linn.

Pavo cristatus, Thien. Fortpflanz. ges. Vög. p. 13, tab. vi. fig. 1 (1845-54); Baedeker, Eier Eur. Vög. tab. 77. fig. 3 (1855-63); Hume & Marsh. Game Birds Ind. i. p. 81 (1879); Legge, Birds Ceyl. p. 731 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 405 (1890); Grant, Cat. Birds B. M. xxii. p. 368 (1893); Oates, Game Birds Ind. i. p. 274 (1898); Sharpe, Hand-l. i. p. 40 (1899).

The eggs of the Common Pea-Fowl are regular ovals, with a

<sup>\*</sup> It is doubtful whether the *Phasianus giganteus* of Thienemann (*Fortpfl enz.* p. 18, tab. vi. fig. 6) is referable to this species. The egg figured measures only 2 05 by 1 65.

5. Raipur, I3th July.

strong glossy shell. In colour they vary from dull white or creamcolour to reddish buff. A few specimens are thickly freckled with reddish brown; the majority are quite plain. They measure from 2.55 to 3.1 in length, and from 1.92 to 2.2 in breadth.

Gould Coll. 4. Laid in confinement. Laid in confinement (Zool, Gar-Zool. Society. dens, London). Salvin-Godman Coll. Laid in confinement (Zcol. Gardens, London, 17th July). Salvin-Godman Coll. Laid in confinement (Zool, Gardens, Loudon). Yorkshire (A. Darley). Salvin-Godman Coll. Prof. Oldham [P.]. Punjab. Hume Coll. Allygurh, Aug.
 Muttra, 16th Oct. Hume Coll. Hume Coll. Etawah. Hume Coll. 1. Etawah, 14th July (A. O. Hume). Hume Coll. 4. Etawah, 15th July. Hume Coll. 3. Etawah, Aug. 1. Etawah, 10th Aug. Hume Coll. 4. Etawah, 25th Aug. (A. O. Hume). Hume Coll. G. Jhansi, 18th July (F. R. Blewitt). Hume Coll. 4. Jhansi, 5th Aug. (F. R. B.). 6. Jhansi, 15th Aug. (F. R. B.). Hume Coll. Hume Coll. Hume Coll. Allahabad, 19th July. Hume Coll.

# Pavo muticus, Linn.

Pavo muticus, Hume & Marsh. Game Birds Ind. i. p. 93 (1879); Grant, Cat. Birds B. M. xxii. p. 371 (1893): Oates, Game Birds Ind. i. p. 280 (1898); Sharpe, Hand-l. i, p. 40 (1899).

The few eggs of the Burmesc Pea-Fowl in the Collection resemble those of P. cristatus and are unmarked. They measure from 2.75 to 3.4 in length, and from 2.05 to 2.15 in breadth.

Laid in confinement (Zool. Gar-Zool. Society. dens. London). Laid in confinement (Zool. Gar-Salvin-Godman Coll. dens, London, May).

# Family NUMIDIDÆ.

### Genus NUMIDA, Linn.

The eggs of the Guinea-Fowls have a very coarse shell, pitted with numerous deep porcs. They have little gloss. They are very broad in relation to their length, some being pyriform and others nearly spherical.

#### Numida meleagris, Linn.

Numida meleagris, Thien. Fortpflanz, ges. Vög. p. 15, tab. vi. fig. 3 (1845-54); Baedeker, Eier Eur. Vög. tab. 77, fig. 1 (1855-63); Grant, Cat. Birds B. M. xxii. p. 375 (1893); Sharpe, Hand-l. i. p. 41 (1899).

The eggs of the Common Helmeted Guinea-Fowl are of a pale brown colour, with the pores much darker. They measure from 1.85 to 2.1 in length, and from 1.5 to 1.6 in breadth.

3. Cumberland (Heysham).

Gould Coll.

3. Laid in confinement (Zool. Gardens, London).

Salvin-Godman Coll.

# Numida coronata, Gray.

(Plate VII, fig. 2.)

Numida coronata, Sharpe's ed. Layard, Birds S. Africa, p. 581, part (1875–84); Grant, Cat. Birds B. M. xxii, p. 376 (1893); Sharpe, Hand-l. i. p. 41 (1899).

The eggs of the Large-helmeted Guinea-Fowl are pale brown, with the pores much darker. Two examples measure respectively: 1.7 by 1.42; 1.6 by 1.4.

2. Laid in confinement (Zool, Gardens, London).

Zool. Society.

#### Numida mitrata, Pall.

Numida mitrata, Cowan, Proc. R. Phys. Soc. Edin. vii. p. 149 (1882); Grant, Cat. Birds B. M. xxii. p. 378 (1893); Sharpe, Hand-l. i. p. 42 (1899).

Numida mitrata, var. tiarata, Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 500, pl. 305. fig. 4 (1885).

The eggs of Pallas's Helmeted Guinea-Fowl are of a pale brownish cream-colour, with the pores much darker, the shell thus presenting a spotted appearance. They measure from 1.85 to 2.05 in length, and from 1.6 to 1.7 in breadth.

6. Betsileo, Madagascar.

Rev. W. Deans Cowan [C.].

# Genus ACRYLLIUM, Gray.

# Acryllium vulturinum (Hardw.).

(Plate VII. fig. 1.)

Aeryllium vulturinum, Grant, Cat. Birds B. M. xxii. p. 385 (1893); Sharpt, Hand-l. i. p. 42 (1899).

The single egg of the Vulturine Guinea-Fowl in the Collection is a regular broad oval, not much compressed at the small end, and thus differs markedly from those of the *Numida* group. The pores

are not so deep and distinct, and the shell possesses a considerable amount of gloss.

It is of a pale cream-colour, the porcs being very slightly darker,

and measures 1.95 by 1.55.

1. Laid in confinement (Zool. Gardens, Zool. Society. London).

# Family MELEAGRIDÆ.

### Genus MELEAGRIS, Linn.

# Meleagris gallopavo, Linn.

Meleagris gallopavo, Thien. Fortpflanz. ges. Vög. p. 14, tab. vi. fig. 2 (1845-54); Baedeker, Eier Eur. Vög. tab. 77. fig. 2 (1855-63); Dresser, Ibis, 1866, p. 25; Grant, Cat. Birds B. M. xxii, p. 387 (1893); Sharpe, Hand-l. i. p. 43 (1899).

Meleagris gallopavo, var. mexicana, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 410 (1874).

Meleagris gallopavo mexicana, Bendire, Life Hist. N. A. Birds, i. p. 116, pl. iii, fig. 15 (1892).

The eggs of this Turkey are hardly separable from those of Lophophorus impeyanus (p. 52). They are of a regular oval shape, occasionally somewhat elongated, and they are glossy and smooth. The ground-colour varies from creamy white to creamy buff. They are rather thickly freckled and spotted all over with chocolate, rufous brown and yellowish brown. The markings are generally small, but occasionally a few blotches of considerable size occur. Specimens measure from 2.3 to 2.65 in length, and from 1.75 to 1.85 in breadth.

13. N. America.

Laid in confinement (Zool. Gardens, London).

Gould Coll. Salvin-Godman Coll.

Laid in confinement (Zool. Gardens, London).

Zool. Society.

### Meleagris fera, Vicill.

Meleagris gallopavo, var. gallopavo, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 404 (1874).

Meleagris gallopavo, Bendire, Life Hist, N. A. Birds, i. p. 112, pl. iii. fig. 14 (1892).

Meleagris americana, Grant, Cat. Birds B. M. xxii. p. 389 (1893). Meleagris fera, Sharpe, Hand-l. i, p. 43 (1899).

The eggs of this species contained in the Collection differ from those of M. gallopavo in being smaller and of a much paler colour. They are of a very broad oval form, and have but little gloss. The ground-colour is of a pale creamy white, and the whole shell is speckled with very pale yellowish brown. The markings are very small, being in no case larger than the head of an ordinary The two eggs measure respectively: 2.25 by 1.72; 2.26 by 1.7.

2. Fort Cobb, Texas (E. Palmer).

Salvin-Godman Coll.

#### Genus AGRIOCHARIS, Chapman.

### Agriocharis ocellata (Cuv.).

(Plate VII, fig. 6.)

Meleagris ocellata, Grant, Cat. Birds B. M. xxii, p. 391 (1893). Agriocharis ocellata, Sharpe, Hand-l. i. p. 43 (1899).

The eggs of the Honduras Turkey do not differ in any particular from those of M. gallopavo. Three specimens measure respectively: 2.4 by 1.75; 2.4 by 1.8; 2.15 by 1.75.

Laid in confinement (Zool. Gardens, Zool. Society. 1 London).

Laid in confinement (Zool. Gardens, Salvin-Godman Coll. London).

1. Laid in confinement (Knowslev Salvin-Godman Coll. Menagerie).

# Family ODONTOPHORIDÆ.

The eggs of the birds of this family differ to a remarkable extent both in colour and shape. Many are plain white, and others recall those of the Quails of the Old World.

## Genus DENDRORTYX, Gould.

# Dendrortyx leucophrys (Gould).

(Plate VII. fig. 7.)

Dendrortyx lencophrys, Grant, Cat. Birds B. M. xxii. p. 394 (1893) Sharpe, Hand-l. i. p. 44 (1899).

An egg of the White-eyebrowed Long-tailed Partridge in the Collection is a regular oval, smooth and with little gloss, and is of a reddish-buff colour, spotted and blotched with reddish brown. It measures 1.75 by 1.22.

1. Coban, Guatemala (Sarg).

Salvin-Godman Coll.

#### Genus OREORTYX, Baird.

# Oreortyx pictus (Dougl.).

(Plate VII. fig. 3.)

Oreortyx pictus, Baird, Brewer & Ridgw, N. Amer. Birds, iii. p. 475 (1874); Bendire, Life Hist, N. A. Birds, i. p. 13 (1892); Grant, Cat. Birds B. M. xxii. p. 397 (1893); Sharpe, Hand-l. i. p. 44 (1899).

The single egg of the Plumed Partridge, or Mountain Quail, in the Collection is of a regular oval shape, smooth, with little gloss and of a pale creamy-buff colour. It measures 1:31 by 1.

1. Monterey, California (Dr. Cunfield). Salvin-Godman Coll.

#### Genus LOPHORTYX, $B_P$ .

## Lophortyx californicus (Shaw & Norld.).

Lophortyx californicus, Baedeler, Eier Eur. Vög. tab. 67, fig. 3 (1855-63):
Baird, Brewer & Ridger, N. Amer. Birds, iii. p. 479 (1874); Grant,
Cat. Birds B. M. xxii. p. 400 (1893): Sharpe, Hand-l. i. p. 44 (1899).

Callipepla californica, Bendire, Life Hist. N. A. Birds, i. p. 23, pl. i. figs. 8-10 (1892).

The eggs of the Californian Quail are pyriform, slightly rough, with little gloss, and of a dull white or pale cream-colour, spotted and blotched with dark brown, pale rufous or yellowish brown. The blotches are frequently large and confluent. Specimens measure from 1.07 to 1.33 in length, and from 9 to 1 in breadth.

 Laid in confinement (Zool, Gardens, Salvin-Godman Coll, London).

4. N. America.

9. San Louis Obispo, California (W. F. Schwarz: Henshaw Coll.).

Old Collection. Salvin-Godman Coll.

#### Genus EUPSYCHORTYX, Gould.

The eggs of the Quails of this genus are pyriform, rarely of an oval shape.

# Eupsychortyx leucopogon (*Less.*). (Plate VII. figs. 4 & 5.)

Eupsychortyx leucotis, Scl. & Salv. P. Z. S. 1879, p. 544.
Eupsychortyx leucopogon, Grant, Cat. Birds B. M. xxii. p. 408 (1893);
Sharpe, Hand-l. i. p. 45 (1899).

The eggs of the White-faced Crested Quail are of a creamy-buff

eolour, marked with pale rufous. In one of the four specimens in the Collection the markings consist of small dots and large confluent freckles. In the others the markings consist of large blotches, frequently confluent and mingled with some specks and spots. They have no gloss, and measure respectively: 1:35 by 1; 1:25 by .95; 1:35 by 1; 1:3 by 1:02.

4. Medellin, Antioquia, U.S. Colombia Salvin-Godman Coll. (*T. K. Salmon*).

#### Eupsychortyx nigrigularis (Gould).

Eupsychortyx nigrogularis, Grant, Cat. Birds B. M. xxii, p. 412 (1893). Eupsychortyx nigrigularis, Sharpe, Hand-l. i. p. 45 (1899).

The eggs of the Black-throated Crested Quail are plain white and fairly glossy. The two specimens in the Collection measure respectively: 1:15 by 9; 1:27 by 87.

1. Honduras (Dyson).

Old Collection.

I. Valladolid, Yucatan (Gaumer).

Salvin-Godman Coll.

#### Eupsychortyx hypoleucus, Gould.

Eupsychortyx hypoleucus, Grant, Cat. Birds B. M. xxii. p. 413 (1893); Sharpe, Hand-l. i. p. 45 (1899).

The eggs of the White-breasted Crested Quail are plain white and very glossy. They measure from 1:15 to 1:3 in length, and from :95 to 1:02 in breadth.

8. San Geronimo, Guatemala.

Salvin-Godman Coll.

#### Genus COLINUS, $L\epsilon ss.$

The eggs of the Colins or 'Bob-Whites' are pyriform, plain white, and slightly glossy.

## Colinus virginianus (Linn.).

Perdix virginiana, Thien. Fortpflanz. ges. Vög. p. 33, tab. vii. fig. 13 (1845-54).

Ortyx virginianus, Gosse, Birds Jamaica, p. 328 (1847); A. & E. Newton, Ibis, 1859, p. 254; Grant, Cat. Birds B. M. xxii, p. 415 (1893).

Ortyx virginianus, var. virginianus, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 468 (1874).

Colinus virginianus, Bendire, Life Hist. N. A. Birds, i. p. 1, pl. i. fig. 1 (1892); Sharpe, Hand-l. i. p. 45 (1899).

The eggs of the Virginian Colin or Bob-White measure from 1:15 to 1:3 in length, and from :9 to 1 in breadth.

3. Montreal (Whiteaves: Hargitt Coll.). Seebolin Coll.

6. N. America. Seebohm Coll.

Massachusetts (Henshaw Coll.). Salvin-Godman Coll. 2.

Windsor Hill, Connecticut (W. Salvin-Godman Coll. 3. Wood).

Santa Cruz, W. Indies (A. & E. Salvin-Godman Coll. 5. Newton).

Jamaica (A. Newton). 1.

Salvin-Godman Coll. Walton, Norfolk, England, 29th J. E. Harting, Esq. [P.]. 3. July.

#### Colinus texanus (Lawr.).

Ortyx texanus, Dresser, Ibis, 1866, p. 27; Grant, Cat. Birds B. M. xxii. p. 419 (1893).

Ortyx virginianus, var. texanus, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 474 (1874).

Colinus virginianus texanus, Bendire, Life Hist. N. A. Birds, i. p. 8 (1892).

Colinus texanus, Sharpe, Hand-l. i. p. 45 (1899).

The eggs of the Texan Colin in the Collection are all of the same size and measure 1.15 by .95.

1. San Antonio, Texas, 2nd July. Salvin-Godman Coll.

4. San Antonio, Texas (H. E. Dresser). Salvin-Godman Coll.

#### Colinus cubanensis (Gould).

Colinus virginianus cabanensis, Bendire, Life Hist. N. A. Birds, i. p. 9

Ortyx cubanensis, Grant, Cot. Birds B. M. xxii. p. 421 (1893). Colinus cubanensis, Sharpe, Hand-l. i. p. 45 (1899).

The egg of the Cuban Colin in the Collection measures 1.17 by .85.

1. Cuba.

Govld Coll.

#### Genus CYRTONYX, Gould.

# Cyrtonyx montezumæ (Vig.).

Cyrtonyx massena. Dresser, Ibis, 1866, p. 29; Baird, Brewer & Ridgw. N. Amer. Birds, iii p. 492 (1874).

Cyrtonyx montezumæ, Bendire, Life Hist. N. A. Birds, i. p. 35, pl. i. fig. 15 (1892); Grant, Cat. Birds B. M. xxii. p. 425 (1893); Sharpe, Hand-l. i. p. 46 (1899).

The eggs of the Massena Harlequin Quail do not apparently differ from those of the species of the genus Colinus. The sole example in the Collection measures 1.22 by 1.

1. San Antonio, Texas (Dr. Heermann). Salvin-Godman Coll.

#### Genus ODONTOPHORUS, Vieill.

#### Odontophorus marmoratus (Gould).

Odontophorus marmoratus, Scl. & Salv. P. Z. S. 1879, p. 545; Grant, Cat. Birds B. M. xxii. p. 433 (1893); Sharpe, Hand-l. i. p. 47 (1899).

The eggs of the Marbled Partridge are regular ovals. They are white with a considerable amount of gloss. The two specimens in the Collection measure respectively: 1.47 by 1.08; 1.5 by 1.1.

 Remedios, Antioquia, U.S. Colombia Salvin-Godman Coll. (T. K. Salmon).

# Order HEMIPODII.

# Family TURNICID. E.

The eggs of the Hemipodes are either pyriform or of a broad oval shape, and they are rather glossy. They are double-spotted, but the surface-markings are frequently so dense that the shell-markings are obliterated.

#### Genus TURNIX, Bonn.

#### Turnix pugnax (Temm,).

Perdix pugnax, Thien. Fortpflanz, ges. Vöy. p. 36, tab. viii. fig. 5 (1845-54).

Turnix ocellatus, Layard, Ann. § Mag. Nat. Hist. (2) xiv. p. 107 (1854).
Turnix taigoor, Hume § Marsh, Game Birds Ind. ii. p. 169 (1879);
Oates ed. Hume, Nests § Egys Ind. B. iii. p. 367 (1890); Barnes,
Journ. Bomb. Nat. Hist. Soc. vi. pl. i. fig. 832 (1891); Grant, Cat. Birds B. M. xxii. p. 530 (1893).

Turnix plumbipes, Hume & Marsh. tom. cit. p. 177.

Turnix pugnax, Oates, Game Birds Ind. i. p. 57 (1898); Sharpe, Hand-l. i. p. 48 (1899).

Mr. Hume thus describes the eggs of the Bustard-Quail:—
"The ground-colour is greyish white, very thickly and minutely speckled all over with what, on close examination, proves to be a mixture of minute dots of yellowish and reddish brown and pale purple. Some eggs have absolutely no markings except this minute dotting or stipling, but the majority have spots and blotches more or less thinly speckled over the surface (often only at the large end, always most thickly there) of intense reddish or blackish brown or even bluish black. The minute dottings in many eggs, everywhere dense, are most so at the large end, where, with the blotches, they occasionally form an irregular imperfect and ill-marked mottled or smudgy cap or zone." Specimens vary in shape from broad oval to pyriform, and measure from '8 to 1.04 in length, and from '71 to '85 in breadth.

	Mussoorie, Himalayas.	Hume Coll.
Н.	Sikhim.	Hume Coll.
3.	Mongphoo, Darjiling (J. Gammie).	Hume Coll.
3.	Sikhim Terai, 13th May.	Hume Coll.
4.	Sikhim Terai, 15th July.	Hume Coll.
3.	Sikhim Terai, 22nd Sept.	Hume Coll.
1.	Deesa, 9th Aug. (E. A. Butler).	Hume Coll.
6.	Hoshungabad, 22nd July.	Hume Coll.
6.	Jhansi.	Hume Coll.
1.	Raipur, C.P., I4th March.	Hume Coll.
1.	Coonoor, Nilghiris, 27th Oct.	Hume Coll.
10.	Salem, Aug.	Hume Coll.
2.	C'evlon.	Purchased.
2.	Ceylon (E. L. Layard).	Salvin-Godman Coll.
4.	Cevlon.	E. L. Layard, Esq. P.
<u>-)</u> .	Cevlon, 10th Feb.	B. Horsbrugh, Esq. P.].
2: 2: 4: 2: 4: 4.	Calcutta, 30th July.	Hume Coll.
4.	Dibrughur, 9th July (J. R. Cripps).	
2.	Dibrughur, 13th Aug. (J. R. C.).	Hume Coll.
4.	Machi, Manipur, 8th June	Hume Coll.
	(A. O. Hume),	
4.	Pegu, Aug. (E. W. Oates).	Hume Coll.
3.	Pegu, 4th Nov. (E. W. O.).	Oates Coll.
66.	Formosa (R. Swinhoe).	Seebohm Coll.
17.	Formosa, Aug. (P. A. Holst).	Seebohm Coll.
	1 ormore, 1105, (1, 11, 1106).	Decount Con.

# Turnix fasciata (Temm.).

(Plate VIII. fig. 4.)

Tunix nigrescens, Steere, List Birds & Mamm. Philippines, p. 25 (1890).
Turnix fasciata, Grant. Cat. Birds B. M. xxii. p. 535 (1893); Sharpe,
Hand-l. i. p. 48 (1899).

The eggs of the Philippine Bustard-Quail are greyish white, densely covered with specks and dots of yellowish brown and small blotches of pale purple. The three examples in the Collection are very broad ovals and measure respectively: 1·12 by ·85: 1·07 by ·85; 1·03 by ·85.

3. Negros, Philippine Is., 10th Nov. Steere Expedition.

Turniz powelli, Guillem. (Plate VIII. figs. 6 & 9.)

Turnix powelli, Grant, Cat. Birds B. M. xxii. p. 537 (1893); Sharpe. Hand-l. i. p. 48 (1899).

The eggs of the Sumbawa Bustard-Quail in the Collection are undistinguishable from many of those of *Turniw pupuax*. They are broad ovals and measure respectively: 1:01 by 8; 1:03 by 82; 95 by 8.

3. Alor Isl., Lesser Sunda Is., April. A. H. Everett, Esq. [C.].

TURNIX. 71

### Turnix sylvatica (Desf.).

Perdix andalusica, Thien. Fortpflunz. ges. Vög. p. 36, tab. viii. fig. 4 (1845-54).

Turnix sylvatica, Baedeker, Eier Eur. Vög. tab. 67. fig. 4 (1855-63);
Dresser, Birds Eur. vii. p. 249 (1876); Grant, Cat. Birds B. M. xxii. p. 537 (1893); Sharpe, Hand-l. i. p. 48 (1899).

Turnix africanus, Hewitson, Ibis, 1859, p. 79, pl. ii. figs. 4, 5.

Turnix andalusica, Seebohm, Eggs of Brit. Birds, p. 278, pl. 59, fig. 2 (1896).

The eggs of the Andalusian Bustard-Quail are greyish white, dotted and speckled with pale purple and yellowish brown, and blotched, generally more densely at the broad end than elsewhere, with very dark brown or black. They vary much in the nature and distribution of the markings. The eggs are pyriform in shape, and measure from '96 to 1·15 in length, and from '8 to '85 in breadth.

10. Tangiers (Favier).2. Algeria (Capt. Loche).

Seebohm Coll. Salvin-Godman Coll.

# Turnix lepurana (Smith). (Plate VIII. fig. 8.)

Turnix lepurana, Sharpe's ed. Layard, Birds S. Africa, p. 608 (1875-84); Grant, Cat. Birds B. M. xxii, p. 539 (1893); Sharpe, Hand-l, i, p. 48 (1899).

The eggs of Smith's Bustard-Quail are greyish white with a pinkish tinge, densely spotted and speckled with pale purple, yellowish brown and reddish brown, more thickly at the larger end than elsewhere. The markings have a tendency to be confluent. The three examples in the Collection are pyriform and measure respectively: '87 by '68; '87 by '7; '88 by '72.

3. Lamu, E. Africa.

F. J. Jackson, Esq., C.B. [P.].

## Turnix dussumieri (Temm.).

Turnix dussumieri, Hume & Marsh. Game Birds Ind. ii. p. 193 (1879);
 Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 371 (1890);
 Barnes, Journ. Bomb. Nat. Hist. Soc. vi. pl. i. fig. 835 (1891);
 Grant, Cal. Birds B. M. xxii. p. 540 (1893);
 Oates, Game Birds Ind. i. p. 60 (1898);
 Sharpe, Hand-l. i. p. 48 (1899).

The eggs of the Little Bustard-Quail are greyish or yellowish white, freekled and spotted all over with pale purple and yellowish brown, and generally blotched as well with dark brown or black. These blotches are sometimes few in number and small in size: at other times they are large and bold. The eggs are pyriform in shape, and measure from '8 to '95 in length, and from '65 to '72 in breadth.

2. N. India.

N. India.
 Hansi, 16th April (W. Blewitt).

3. Sholapur, 17th Aug. (J. Davidson).

9. Formosa (R. Swinkoe).

Hume Coll. Hume Coll.

Hume Coll.

Seebohm Coll.

#### Turnix tanki. Bluth.

Turnix tanki, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 370 (1890); Grant, Cat. Birds B. M. xxii. p. 544 (1893); Oates, Game Birds Ind. i. p. 63 (1898); Sharpe, Hand-l. i. p. 49 (1899).

Turnix joudera, Hume & Marsh. Game Birds Ind. ii. p. 187 (1879); Barnes, Journ. Bomb, Nat. Hist. Soc. vi. pl. i. fig. 834 (1891).

The eggs of the Indian Bustard-Quail present several types of markings, but as they can in all cases be matched by eggs of T. pugnax, no separate description appears necessary. They are pyriform, and measure from 85 to 9 in length, and 75 in breadth.

Sealkote, 26th Aug. (A. Oldham). Hume Coll. Raipur (F. R. Blewitt). Hume Coll.

1. Raipur, June (F. R. B.). Hume Coll.

4. Mysore, 29th April (J. Maepherson). Hume Coll.

#### Turnix nigricollis (Gm.).

Turnix nigricollis, Cowan, Proc. R. Phys. Soc. Edin, vii. p. 149 (1882); Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. p. 494, pl. 305. fig. 3 (1885); Grant, Cat. Birds B. M. xxii, p. 549 (1893); Sharpe, Hand-l, i, p. 49 (1899).

The eggs of the Madagascar Bustard-Quail have a decided rufous tinge, but otherwise they closely resemble those of T. pugnax. They are pyriform, and measure from .84 to 1 in length, and from .73 to S in breadth.

11. Betsileo, Madagascar.

Rev. W. Deans Cowan [C.].

# Turnix melanogaster (Gould).

Turnix melanogaster, Gould, Handb, Birds Austr. ii. p. 178 (1865); Campbell, Nests & Eggs Austr. Birds, p. 50 (1883); North, Nests & Eggs Austr. Birds, p. 285, pl xvi. fig. 11 (1889); Grant, Cat. Birds B. M. xxii, p. 550 (1893); Sharpe, Hand-l. i. p. 49 (1899).

The eggs of the Black-breasted Bustard-Quail are pinkish white, very closely and minutely speekled with pale reddish brown and sparingly blotched with pale purple and black. The blotches are very firm and well-defined. The two examples in the Collection are blunt ovals and measure respectively: 1.15 by .82; 1.12 by .82.

2. Moreton Bay, N.E. Australia. Gould Coll.

# Turnix varia (Lath.).

Perdix varia, Thien. Fortpflanz. ges. Vög. p. 53, tab. xii. fig. 6 (1845-54). Turnix varius, Gould, Handb. Birds Austr. ii. p. 179 (1865); Campbell, Nests & Eggs Austr. Birds, p. 50 (1883); North, Nests & Eggs Austr. Birds, p. 285 (1889).

Turnix varia, Grant, Cat. Birds B. M. xxii. p. 551 (1893); Sharpe, Hand-l. i. p. 49 (1899).

TURNIX. 7:3

The eggs of the Variegated Bustard-Quail are greyish white, minutely and closely speckled with reddish brown, pale purple and dark brown. Some are, in addition, marked with small blotches of very dark brown or black. These markings are equally distributed over the egg and are for the most part distinct and well-defined. The eggs are pyriform, and measure from 1·12 to 1·3 in length, and from ·88 to ·95 in breadth.

4. Australia.

Australia.
 Australia.

Moreton Bay, N.E. Australia.
 N.W. Australia.

2. Gippsland, Victoria.

Gould Coll.

Salvin-Godman Coll. Sir F. D. Cooper [P.].

Gould Coll, Gould Coll.

F. A. Philbrick, Esq., Q.C. [P.].

#### Turnix castanonota (Gould).

Perdix (Hemipodius) castanotus, Thien. Fortpflanz. ges. Vög. p. 54, tab. xii. fig. 7 (1845-54).

Turnix castanotus, Gould, Handb. Birds Austr. ii, p. 183 (1865).

Turnix castanonota, Grant, Cat. Birds B. M. xxii. p. 552 (1893); Sharpe, Hand-l, i. p. 49 (1899).

The eggs of the Chestnut-backed Bustard-Quail are quite different from those of all the other species of this group, being white, sparingly marked with small, distinct, round spots of pale purple and black, the latter predominating. They are pyriform, and measure from 95 to 103 in length, and from 84 to 87 in breadth.

1. Australia.

H. F. Walter, Esq. [P.]. Gould Coll.

7. Port Essington, N. Australia.

# Turnix pyrrhothorax (Gould). (Plate VIII. fig. 12.)

Turnix pyrrhothorax, Gould, Handb, Birds Austr. ii. p. 186 (1865);
 North, Nests & Eggs Austr. Birds, p. 287 (1889); Grant, Cat.
 Birds B. M. xxii, p. 553 (1893); Sharpe, Hand-l. i, p. 49 (1899).

The eggs of the Rufous-chested Bustard-Quail are greyish white, densely marked with more or less confluent specks of pale purple, yellowish brown, brown and black. The two examples in the Collection are very broadly pyriform, and measure respectively: '95 by '8; '93 by '8.

2. River Darling, Australia.

Gould Coll.

# Turnix velox (Gould).

(Plate VIII. fig. 7.)

Turnix velox, Gould, Handb. Birds Austr. ii, p. 184 (1865); Campbell, Nests & Eggs Austr. Birds, p. 50 (1883); North, Nests & Eggs Austr. Birds, p. 286 (1889); Grant, Cat. Birds B. M. xxii, p. 553 (1893); Sharpe, Hand-l. i. p. 49 (1899).

In the eggs of the Swift-flying Bustard-Quail the ground-colour is pinkish, and this is covered in varying degrees with speckles, spots and small blotches, all of them more or less confluent, of dark reddish brown, pale purple, vellowish brown and chocolatebrown. On some specimens the blotches are of considerable size. Some examples are pyriform, others broad ovals, and they measure from 9 to 1 in length, and from 65 to 75 in breadth.

1. Australia.

West Australia. 4 South Australia. Salvin-Godman Coll. Gould Coll.

Gould Coll.

#### Genus PEDIONOMUS. Gould.

### Pedionomus torquatus, Gould.

Pedionomus torquatus, Gould, Handb. Birds Austr. ii. p. 187 (1865): Campbell, Nests & Eggs Austr. Birds, p. 51 (1883); North, Nests & Eggs Austr. Birds, p. 288, pl. xvi. tig. 12 (1889); Grant, Cat. Birds B. M. xxii, p. 554 (1893); Sharpe, Hand-l. i, p. 49 (1899).

The eggs of the Collared Plain-Wanderer are somewhat remarkable. Two specimens in the Collection are pyriform, very lengthened and pointed, and closely resembling in shape those of some of the Ployers. They are of a pale green colour, thickly speckled and blotched with underlying markings of pale purple and surfacemarkings of dark brown and yellowish brown. A third specimen is white with numerous shell-markings of pale purple and a few surface-spots of brown. This latter is much shorter than the two above described. The three examples measure respectively: 1.4 by ·97: 1·35 by ·96: 1·2 by ·96.

2. New South Wales (Nelson).

Gould Coll.

I. South Australia.

Gould Coll.

# Order PTEROCLIDIFORMES.

# Family PTEROCLIDIDÆ.

The eggs of the Sand-Grouse are long and cylindrical, both ends being equally rounded. Occasionally an example is biconical or slightly compressed at either end.

The texture is fine and smooth and the shell has a fine gloss.

All the eggs of the Sand-Grouse are double-spotted. The shellmarkings consist of spots and blotches of irregular shape and of various shades of grey, lavender and pale purple. They are always numerous and distinctly visible. The eggs of all the species are so similar in colour and markings that no particular reference to their coloration need be made.

The surface-markings vary considerably in colour and character, and are of much service for the purpose of identification.

The eggs of the Sand-Grouse are curiously like those of the Nightiars both in shape and coloration.

### Genus SYRRHAPTES, Illiger.

### Syrrhaptes paradoxus (Pall.).

Syrrhaptes paradoxus, Newton, P. Z. S. 1861, p. 397, pl. xxxix, fig. 1;
 Dresser, Birds Eur., vii. p. 75 (1876); Seebohm, Brit. Birds. ii.
 p. 419, pl. 20 (1884); Grant, Cat. Birds B. M. xxii. p. 2 (1893);
 Seebohm, Eggs of Brit. Birds, p. 160, pl. 47, figs. 10, 12 (1896);
 Sharpe, Hand-t. i. p. 50 (1899).

The eggs of Pallas's Three-toed Sand-Grouse are of a pale stone-colour. The surface-markings, consisting of specks, spots and blotches of yellowish brown, are evenly distributed over the shell. Seven examples measure from 1.55 to 1.7 in length, and from 1.13 to 1.25 in breadth.

- Laid in confinement (Zool, Gardens, P. L. Sciater, Esq. [P.]. Amsterdam).
- 5. Altai Mountains, May (C. A. Tancré). Seebohm Coll.

#### Syrrhaptes tibetanus, Gould.

(Plate VIII. fig. 13.)

Syrrhaptes tibetanus, Hume & Marsh. Game Birds Ind. i. p. 43 (1879): Grant, Cat. Birds B. M. xxii. p. 5 (1893): Oates, Game Birds Ind. i. p. 18 (1898); Sharpe, Hand-l. i. p. 50 (1899).

The eggs of the Tibetan Three-toed Sand-Grouse in the Collection are of a pale creamy-buff colour. Both the shell-markings and the surface-markings are small, and the latter consist entirely of spots of dull reddish brown, evenly distributed over the whole shell. Two examples measure respectively: 1.9 by 1.37; 2 by 1.33.

2. Pamir, C. Asia.

St. G. Littledale, Esq. [P.].

### Genus PTEROCLIDURUS, $B_P$ .

# Pteroclidurus alchatus (Linn.).

(Plate VIII, fig. 11.)

Pterocles alchata, Hume & Marsh. Game Birds Ind. i. p. 77 (1879). Pteroclurus alchata, Grant, Cat. Birds B. M. xxii. p. 7 (1893); Oates, Game Birds Ind. i. p. 22 (1898). Pteroclidurus alchatus, Sharpe, Hand-l. i. p. 50 (1899).

The egg of the Eastern Pin-tailed Sand-Gronse in the Collection does not resemble the eggs of *P. pyrenaicus* so closely as might be expected. It is of a creamy-buff colour, and the surface-markings, which consist of small specks, spots and smudges of

pinkish brown, are rather closely deposited over the whole shell. It measures 1.66 by 1.15.

1. Jeenpur, Sind, 10th July.

Hume Coll.

#### Pteroclidurus pyrenaicus (Briss.).

Pterocles alchata, Thien. Fortyflanz. ges. Vög. p. 48, tab. x. fig. 2 a, b (1845-54); Baedeker, Eier Eur. Vög. tab. 21. fig. 8 (1855-63); Salvin, Ibis, 1859, p. 352; Tristram, Ibis, 1860, p. 70; Bree, Birds Eur. iii. p. 221, pl. — (1867); 2nd ed. iv. p. 131, pl. — (1875); Saunders, Ibis, 1871, p. 223; Dresser, Birds Eur. vii. p. 67 (1874).

Pteroclurus pyrenaicus, Grant, Cat. Birds B. M. xxii, p. 9 (1893). Pteroclurus alchata, Irby, Orn. Str. Gibr. 2nd ed. p. 236 (1895). Pteroclidurus pyrenaicus, Sharpe, Hand-l, i. p. 50 (1899).

The eggs of the Western Pin-tailed Sand-Grouse may be separated from those of all the other species of Sand-Grouse by their bold and brilliant coloration. They vary from a pale creamy buff to a fairly dark buff colour. The surface-markings consist of spots and blotches of rather dark reddish brown. These are, as a rule, very distinct and well-defined, but occasionally they are confluent, and are always very evenly distributed over the egg. The specimens in the Collecton measure from 1.65 to 1.96 in length. and from 1:15 to 1:3 in breadth.

Seville, Spain (H. Saunders). Seville (II. S.). 2. Seville (*H. S.*). 3. Arganda, Spain (H. S.). Malaga, Spain (H. S.). 2. Seville (L. H. Irby). 1. Spain. 2. South Spain. 5. Tunis. Harakta, Algeria, 10th June.

Seebohm Coll. Seebohm Coll. Seebohm Coll. Seebohm Coll. Seebohm Coll. Gould Coll. Lord Lilford [P.]. Louis Fraser, Esq. [C.]. Gould Coll. 2. Harakta, 10th June (W. H. Simpson). Salvin-Godman Coll. Salvin-Godman Coll.

Seebohm Coll.

3. Harakta, 10th June ( W. H. S.). 3. Harakta, 10th June (W. H. S.). Salvin-Godman Coll. Plains of Roumila, 21st May (W. Salvin-Godman Coll.

H. S.).

# Pteroclidurus namaquus (Gm.). (Plate VIII, figs. 5 & 10.)

Pterocles namaqua, Sharpe's ed. Layard, Birds S. Africa, p. 574 (1875-84).

Pteroclurus namaqua, Grant, Cat. Birds B. M. xxii, p. 10 (1893). Pteroclidurus namaquus, Sharpe, Hand-l. i. p. 50 (1899).

The two eggs of the Namaqua Pin-tailed Sand-Grouse in the ('ollection differ much from each other in colour, but they can be matched by eggs of the next species, P. exustus. They measure respectively: 1.35 by 46; 1.33 by 95.

2. South Africa.

E. L. Lavard, Esq. [P.].

### Pteroclidurus exustus (Temm.).

Pterocles senegalensis, Thien. Fortpflanz. ges. Vög. p. 49, tab. x. fig. 6 a, b (1845-54).

Pterocles exustus, Burgess, P. Z. S. 1855, p. 30, Aves, pl. lxxviii, fig. 1: Hume & Marsh. Game Birds Ind. i. p. 69 (1879); Outes ed. Hume. Nests & Egys Ind. B. iii. p. 361 (1890).

Pteroclurus existus, Grant, Cat. Birds B. M. xxii, p. 12 (1893); Oates, Game Birds Ind. i. p. 26 (1898).

Pteroclidurus exustus, Sharpe, Hand-l. i. p. 50 (1899).

The eggs of the Common Pin-tailed Sand-Grouse are pinkish stone-colour, greyish white or cream-colour, occasionally tinged with green. The surface-markings consist of spots, specks, streaks and blotches of olive-brown and greyish brown. These markings, as a rule, thickly cover the shell, and occasionally they form a bold ring round one end of the egg. One specimen in the series is perfectly plain. They measure from 1·3 to 1·6 in length, and from ·95 to 1·15 in breadth.

11.	India.	Gould Coll,
2.	Sind (J. H. Gould).	Salvin-Godman Coll.
35,	Sirsa District.	Hume Coll.
18.	Sirsa District, 21st April.	Hume Coll.
1.	Sirsa District, 30th April.	Hume Coll.
1.	Sirsa District, 8th May.	Hume Coll.
2.	Sirsa District, 25th May.	Hume Coll.
1.	Sirsa District, 12th June.	Hume Coll.
2.	Sirsa District, 1st July.	Hume Coll.
2.	Sirsa District, 10th July.	Hume Coll.
3.	Sirsa District, 11th July.	Hume Coll.
2.	Sirsa District, 12th July.	Hume Coll.
2.	Sirsa District, 1st Sept.	Hume Coll.
2. 1. 2. 3. 2. 3. 2. 3. 2.	Sirsa District, 3rd Sept.	Hume Coll.
2.	Sirsa District *, 7th Sept.	Hume Coll.
2. 2. 2.	Hissar, 15th March (W. Blewitt).	Hume Coll.
2.	Hissar, 15th March (W. B.).	Hume Coll.
2.	Hissar, 20th March (W. B.).	Hume Coll.
2.	Hissar, 1st April (W. B.).	Hume Coll.
1.	llissar, 18th Sept. (W. B.).	Hume Coll.
3.	Hansi, 15th March.	Hume Coll.
2.	Hansi, 2nd April.	Hume Coll.
3.	Hansi, 17th May.	Hume Coll.
3.	Hansi, 3rd June.	Hume Coll.
1.	Hansi, 10th June.	Hume Coll.
1.	Delhi, 4th March (C. T. Bingham).	Hume Coll.
2.	Gurhi Hursroo, 13th May.	Hume Coll.
2.	Gurgaon, 7th Oct. (W. N. Chill).	Hume Coll.
1.	Agra.	Hume Coll.
3.	Etawah, 15th July.	Hume Coll.
2.	Etawah, 7th Feb. (W. E. Brooks).	Seebohm Coll.
1.	Jhansi, 13th June.	Hume Coll.
2.	Sambhur, 21st May (R. M. Adam).	Hume Coll.
	• • • • • • • • • • • • • • • • • • • •	

<sup>\*</sup> All the eggs from the Sirsa District were probably taken by Khan Nizam-oo-deen, Khan Bahadoor (cf. Hume,  $\ell,c.$ ).

 1. Hoshungabad, 6th May.
 Hume Coll.

 1. Nimar, 10th May.
 Hume Coll.

 1. Saugor.
 Hume Coll.

 2. Palawdee, 12th Feb.
 Hume Coll.

2. Jodhpur, March. W. T. Blanford, Esq. [P.].

#### Genus PTEROCLIS, Temm.

#### Pteroclis arenarius (Pall.).

Pterocles arenarius, Thien. Fortpflanz. ges. Vög. p. 48, tab. x. fig. 1 (1845-54); Baedeker, Eier Eur. Vög. tab. 67. fig. I (1855-63); Salvin, Ibis, 1859, p. 353; Tristram, Ibis, 1860, p. 69; Bree, Birds Eur. iii. p. 226. pl. — (1867); 2nd ed. iv. p. 135, pl. — (1875); Saunders, Ibis, 1871. p. 223; Dresser, Birds Eur. vii. p. 61 (1874); Danford, Ibis, 1878, p. 27; Hume & Marsh. Game Birds Ind. i. p. 47 (1879); Barnes, Stray Feath. ix. p. 219 (1880); Grant, Cat. Birds B. M. xxii. p. 18 (1893); Oates, Game Birds Ind. i. p. 36 (1898).

Pteroclis arenarius, Sharpe, Hand-l. i. p. 50 (1899).

The eggs of the Black-bellied Sand-Grouse are, on the whole, very pale, and present a marbled appearance. The ground is greyish white, cream-colour or pale buff, and occasionally very pale green. The surface-markings are yellowish brown, plain brown or pale rufous, and consist of ill-defined streaky blotches which are, more or less, confluent. The eggs measure from 1.7 to 2 in length, and from 1.23 to 1.33 in breadth.

Granada, Spain.
 Granada (H. Saunders).
 Arganda, Spain, 15th June (H. S.).
 Seebohm Coll.
 Seebohm Coll.

 Tzhar, Algeria, 4th June (W. H. Salvin-Godman Coll. Simpson).

 Harakta, Algeria, 2nd June (W. Salvin-Godman Coll. H. S.).

Harakta, 10th June (W. H. S.).
 Madracen, Constantine, 27th May.
 Tunis.
 Salvin-Godman Coll.
 Salvin-Godman Coll.
 Louis Fraser, Esq. [C.].

 Erzeroum, Asia Minor.
 Chaousk-Keui, Asia Minor, 11th May (C. G. Danford).
 Seebohm Coll.

3. Baghas-Ivan, Asia Minor, 9th May Seebohm Coll. (C. G. D.).

6. Jazli-tash, Asia Minor, 12th May Seebohm Coll. (C. G. D.).

 Chaman, Afghanistan, 15th May (H. E. Barnes).

# Pteroclis coronatus, Licht.

Pterocles coronatus, Thien. Fortpflanz, ges. Vög. p. 49, tab. x. fig. 4 a, b (1845-54): Hume & Marsh, Game Birds Ind. i. p. 57 (1879); Barnes, Stray Feath, ix. pp. 219, 458 (1880); Dresser, Birds Eur. ix. (Suppl.) PTEROCLIS, 79

p. 313 (1896); Grant, Cat. Birds B. M. xxii. p. 23 (1893); Oates, Game Birds Ind. i. p. 41 (1898).

Pteroclis eoronatus, Sharpe, Hand-l. i. p. 51 (1899).

An egg of the Coronetted Sand-Grouse in the Collection is creamcoloured, with surface-spots and dashes of yellowish brown evenly distributed over the whole shell. It measures 1.6 by 1.05.

 Chaman, Afghanistan, 27th May Hume Coll. (11. E. Barnes).

#### Pteroclis fasciatus (Scop.).

Pterocles fasciatus, Hume & Marsh. Game Birds Ind. i. p. 59 (1879),
 iii. App. pl. ii. (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii.
 p. 364 (1890); Grant, Cat. Birds B. M. xxii. p. 27 (1893); Oates,
 Gume Birds Ind. i. p. 45 (1898).

Pteroclis fasciatus, Sharpe, Hand-l. i. p. 51 (1899).

The ground-colour of the eggs of the Indian Painted Sand-Grouse is pinkish white, pinkish buff or salmon-pink. The surface-markings consist of specks and spots of pale reddish brown: these are generally evenly distributed over the shell, but sometimes they are collected at one end. A few examples have some large blotches of bright reddish brown at the larger end. Specimens measure from 1°3 to 1°6 in length, and from 9 to 1°05 in breadth.

1.	Denn, som May (C. 1. Dingnam).	11 time Cott
1.	Hoshungabad, 6th May (E. C. Nunn).	Hume Coll.
2.	Sambhur (R. M. Adam).	Hume Coll.
3.	Sambhur, 20th April (R. M. A.),	Hume Coll.
4.	Sambhur, 20th April (R. M. A.).	Hume Coll.
2.	Sambhur, 27th April (R. M. A.).	Hume Coll.
3.	Sambhur, 1st May $(R. M. A.)$ .	Hume Coll.
3.	Sambhur, 4th May (R. M. A.).	Hume Coll.
3.	Sambhur, 8th May (R. M. A.).	Hume Coll.
3.	Sambhur, 8th May (R. M. A.).	Hume Coll.
2.	Sambhur, 8th May (R. M. A.).	Hume Coll.
3.	Sambhur, 21st May (R. M. A.).	Hume Coll.
2.	Chanda, C. Provs., 28th Nov.	Hume Coll.

(R. Thompson).

Dollai 20th May (C. T. Pingham) Huma Call

## Order COLUMBIFORMES.

The eggs of the Pigeons are white, the shell being almost invariably fine and smooth. The amount of gloss is variable.

They are normally of a perfect elliptical shape, both ends being equally rounded. Occasionally specimens are biconical or spheroidal in form: oval-shaped eggs are rarely met with.

In many large series of the eggs of the Pigeons, a number of specimens may be noticed of a drab or brown colour or with a

creamy tinge. There can be little doubt, however, that the eggs of all Pigeons are white when first laid, and that discoloration takes place after incubation has commenced. A few instances may be cited to support this conclusion.

The eggs of Zenaida meridionalis are said by Gosse ('Birds of Jamaica,' p. 307) to be of a drab colour, but the specimens taken by Messrs. A. & E. Newton (Ibis, 1859, p. 253), and now in the

National Collection, are white.

The eggs of *Cana capensis* in the Collection are of a cream-colour, but Andersson ('Birds of Damara Land,' p. 235) remarks of this species that "its two white eggs have a rosy tint."

Of the fifteen eggs of Chalcophaps indica in the Collection, nine

are cream-coloured, but no less than six are pure white.

In the following descriptions, therefore, of the eggs of the Pigeons, it will be understood that they are white unless the contrary is stated.

#### Sub-Order COLUMBÆ.

# Family TRERONIDÆ.

Sub-Family TRERONINÆ.

Genus SPHENOCERCUS, Gray.

### Sphenocercus sphenurus (Vig.).

Sphenocercus sphenurus, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 377 (1890); Salvadori, Cat. Birds B. M. xxi, p. 8 (1893); Sharpe, Hand-l. i. p. 52 (1899).

The eggs of the Wedge-tailed Green Pigeon have comparatively little gloss. They measure from 1.07 to 1.25 in length, and from .84 to .93 in breadth.

India. Gould Coll.
 Gurhwal, May. Hume Coll.
 Mussoorie (T. Hutton). Hume Coll.

#### Genus VINAGO, Cuv.

### Vinago delalandei $(B_{l})$ .

Treron delalandii, Sharpe's ed. Layard, Birds S. Africa, p. 558 (1875–84); Ayres, Ibis, 1885, p. 345.

Vinago delalandei, Salvadori. Cat. Birds B. M. xxi. p. 24 (1893): Sharpe, Hand-l. i. p. 52 (1899).

The egg of Delalande's Green Pigeon in the Collection measures 1.18 by .96 and has but little gloss.

1. Natal (T. Ayres).

Salvin-Godman Coll.

## Genus CROCOPUS, $B_{P}$ .

CROCOPUS

#### Crocopus phænicopterus (Lath.).

Crocopus phenicopterus, Beavan, P. Z. S. 1864, p. 376; Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 370 (1890); Salvadori, Cat. Birds B. M. xxi. p. 26 (1893); Blanf. Fauna Brit. Ind., Birds, iv. p. 5 (1898); Sharpe, Hand-l. i. p. 53 (1899).

Crocopus viridifrons, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 373 (1890): Salvadori, Cat. Birds B. M. xxi. p. 28 (1893); Sharpe,

Hand-t. i. p. 53 (1899).

The eggs of the Bengal Green Pigeon measure from 1:16 to 1:35 in length, and from '9 to 1 in breadth. Some are glossy, while others have only a faint gloss.

١.	Banarunpur (G. E. L. Marshau).	riume Con.
$^{2}.$	Hansi, 17th March (W. Blewitt).	Hume Coll.
2.	Hansi, 16th May (W. B.).	Hume Coll.
	Hansi, 18th May (W. B.).	Hume Coll.
1.	Hansi, 22nd May (W. B.).	Hume Coll.
	Maunbhoom, April (R. C. Beavan).	Salvin-Godman Co
	Thoungvin River, Tenasserim, 16th	Hume Coll.
	March (C. T. Ringham)	

I. Thoungvin River, 17th March Hume Coll. (C. T. B.).

1. Hansi, C. India, 5th April (W.

1 Cohamman (C T T Manakall)

Hume Coll.

II..... C-11

#### Crocopus chlorigaster (Blyth).

Crocopus chlorigaster, Legge, Birds Ceyl. p. 722 (1879); Oates ed. Humc. Nests & Eggs Ind. B. ii. p. 372 (1890).

Crocopus chlorogaster, Salvadori, Cat. Birds B. M. xxi. p. 30 (1893); Sharpe, Hand-l. i. p. 53 (1899).

The eggs of the Southern Green Pigeon are highly glossed, and measure from 1.1 to 1.35 length, and from 9 to 1 in breadth.

	Transi, C. Thank, John Injury (77)	TITUITO COLL.
	Blewitt).	
1.	Hansi, 9th April (W. B.).	Hume Coll.
1.	Hansi, 14th April (W. B.).	Hume Coll.
2.	Hansi, 19th April (W. B.).	Hume Coll.
1.	Hansi, 21st April (W. B.).	Hume Coll.
1.	Hansi, 22nd April (W. B.).	Hume Coll.
2.	Hansi, 23rd April (W. B.).	Hume Coll.
2.	Hansi, 27th April (W. B.).	Hume Coll.
2.	Hansi, 2nd May (W. B.).	Hume Coll.
Ι.	Hansi, 14th May (W. B.).	Hume Coll.
1.	Bareilly, 2nd June (A. O. Hume).	Hume Coll.
Ι.	Bareilly, 16th May (A. O. H.).	Hume Coll.
1.	Etawah, 23rd March (A. O. H.).	Hume Coll.
1.	Etawah, 15th April (A. O. H.).	Hume Coll.
2.	Lucknow, 5th May.	Hume Coll.
ł.	Mundla, 6th April.	Hume Coll

82 TRURONIDÆ.

#### Genus TRERON, V.

## Treron nipalensis (Hodgs.).

Treron nepalensis, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 370 (1890).

Treron nipalensis, Salvadori, Cat. Birds B. M. xxi. p. 34 (1893); Sharpe. Hand-l. i. p. 53 (1899).

The egg of the Thick-billed Green Pigeon in the Collection measures 1.13 by .89, and is moderately glessy.

Hume Coll. 1. Thoungvin River, Tenasserim, 28th March (C. T. Bingham).

#### Genus OSMOTRERON, Bp.

#### Osmotreron phayrei, Bluth.

()smotreron phayrii, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 376 (1890).

()smotreron phayrei, Salvadori, Cat. Birds B. M. xxi. p. 43 (1893); Sharpe, Hand-l. i. p. 54 (1899).

The egg of the Ashy-headed Green Pigeon in the Collection measures 1.2 by .8, and is highly glossy.

 Tavoy, Burma, 19th March (J. Dar- Hume Coll. ling).

## Osmotreron malabarica (Jerd.).

Osmotreron malabarica, Oates ed. Hume. Nests & Eggs Ind. B. ii. p. 375 (1890); Salvadori, Cat. Birds B. M. xxi. p. 45 (1893); Sharpe, Hand-l. i. p. 54 (1899).

Osmotreron affinis, Blanf. Fauna Brit. Ind., Birds, iv. p. 8 (1898).

The eggs of the Grey-fronted Green Pigeon in the Collection measure respectively: 1.07 by .85; 1.1 by .85, and are fairly glessy.

- Wynaad, S. India, 7th April (J. Dar- Hume Coll. ling).
- Wynaad, 10th April (J. D.). Hume Coll. 1.

## Osmotreron bicineta (Jerd.).

Osmotreron bicincta, Legge, Birds Ceyl. p. 725 (1879); Outes ed. Hume, Nests & Eggs Ind. B. ii, p. 374 (1890); Salvadori, Cat. Birds B. M. xxi, p. 57 (1893); Sharpe, Hand-l. i. p. 54 (1899).

The eggs of the Orange-breasted Green Pigeon measure from 1 to 1.1 in length, and from .S5 to .9 in breadth, and have a faint gloss.

Hume Coll. Tippera, April (V. Irwin). Hume Coll.

 Pegu, 15th May (E. W. Oates).
 Pegu, 15th May (E. W. O.). Seebohm Coll.

Oates Coll. 1. Pegu, 20th March (E. W. O.).

## Osmotreron vernans (Linn.).

Treron vernans, Everett, P. Z. S. 188), p. 225; id. List Birds Rora. p. 196 (1889).

Osmotreron vernaus, Ottes ed. Hume, Nests & Eggs Ind. B. ii. p. 375 (1890); Salvadori, Cat. Birds B. M. xxi. p. 60 (1893); Sharpe, Hand-l. i. p. 54 (1899).

The eggs of the Pink-necked Green Pigeon measure from 1.08 to 1.12 in length, and from .8 to .88 in breadth, and have but little gloss.

- 2. Kussoom, Malay Peninsula, 7th July Hume Coll. (W. Darison).
- 2. Klang, Malay Peninsula, 12th Jan. Hume Coll.  $(W, D_{\cdot}).$
- Labuan, Borneo, May,

A. H. Everett, Esq. [P.].

## Genus PHABOTRERON, $B_P$ .

## Phabotreron leucotis (Temm.).

Phabotreron leucotis, Salvadori, Cat. Birds B. M. xxi, p. 67 (1893); Sharpe, Hand-l. i. p. 55 (1899). Geopelia striata, Grant & Whitehead \* (lapsu), Ibis, 1898, p. 246.

The eggs of the White-eared Pigeon are glossy, and measure from 1.05 to 1.13 in length, and from .77 to .8 in breadth.

4. Engaño, North-east Luzon, May. J. Whitehead, Esq. [C.].

## Sub-Family PTILOPODINÆ.

## Genus PTILOPUS. Swains.

## Ptilopus perousei, Peale.

Ptilonopus perousii, Whitmee, Ibis, 1875, p. 441. Ptilopus perousei, Salvadori, Cat. Birds B. M. xxi. p. 87 (1893); Sharpe, Hand-l. i. p. 56 (1899),

The egg of Marie's Fruit-Pigeon in the Collection measures 1.16 by .97, and has little or no gloss.

1. Tongatabu, Friendly Islands.

P. B. Leefe, Esq. [P.].

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## Ptilopus swainsoni, Gould.

Ptilinopus swainsonii, Gould, Handb. Birds Austr. ii. p. 106 (1865). Ptilopus swainsoni, Salvadori, Cat. Birds B. M. xxi. p. 95 (1893); Sharpe, Hand-l. i. p. 57 (1899).

<sup>\*</sup> The late Mr. Whitehead informed me that the eggs of this species were attributed by him to Geopelia striata by an oversight. They were really those of the present species.

The eggs of Swainson's Fruit-Pigeon in the Collection measure respectively: 1.2 by .87; 1.26 by .87. They have only a faint gloss.

1. Cape York, N. Australia.

Gould Coll. Gould Coll.

Australia.

Ptilopus ewingi, Gould.

## Ptilinopus ewingii, Gould, Handb, Birds Austr. ii. p. 107 (1865).

Ptilopus ewingi, Salvadori, Cat. Birds B. M. xxi. p. 96 (1893): Sharpe, Hand-l, i. p. 57 (1899).

The eggs of Ewing's Fruit-Pigeon in the Collection are glossless and measure respectively: 1.15 by .79; 1.22 by .85.

1. Somerset, Cape York, 3rd Dec.

C. A. Barnard, Esq. [C.]. C. A. Barnard, Esq. [C.].

Somerset, 8th Jan.

#### Ptilopus fasciatus, Peale.

Ptilonopus fasciatus, Finsch & Hartl. Fauna Centralpolyn. p. 115, t. ii. fig. 3 (1867); Whitmee, Ibis, 1875, p. 442.

Ptilopus fasciatus, Salvadori, Cat. Birds B. M. xxi. p. 98 (1893): Sharpe, Hand-l. i. p. 57 (1899).

The eggs of the Banded Fruit-Pigeon in the Collection are without gloss, and measure respectively: 1.28 by 88: 1.27 by 92.

Samoa, Sept.

Rev. S. J. Whitmee P.J. Rev. S. J. Whitmee P.J.

1. Samoa, Oct.

## Genus LAMPROTRERON, $B_P$ .

## Lamprotreron superba (Temm. & Knip).

Lamprotreron superbus, Gould, Handb. Birds Austr. ii. p. 108 (1865): Campbell, Nests & Eggs Austr. Birds, p. 48 (1883); North, Nests & Eggs Austr. Birds, p. 269 (1889).

Ptilopus superbus, Ramsay, Proc. Linn. Soc. N. S. W. (2) i. p. 1151 (1887); Salvadori, Cat. Birds B. M. xxi. p. 112 (1893).

Lamprotreron superba, Sharpe, Hand-l. i. p. 58 (1899).

The egg of the Superb Fruit-Pigeon in the Collection is glossless, and measures 1:12 by :82.

 Somerset, Cape York, 29th Jan. C. A. Barnard, Esq. [C.].

#### Genus MEGALOPREPIA, Reichenb.

## Megaloprepia assimilis (Gould).

Megaloprepia assimilis, Gould, Handb, Birds Austr. ii. p. 111 (1865); North, Nests & Eggs Austr. Birds, p. 270 (1889): Salvadori, Cat. Birds B. M. xxi. p. 168 (1893); Sharpe, Hand-l. i. p. 62 (1899).

The eggs of the Allied Fruit-Pigeon in the Collection measure

respectively: 1·4 by ·95; 1·39 by ·95, and have a small amount of gloss.

1. Somerset, Cape York, 7th Dec.

C. A. Barnard, Esq. [C.].

1. Somerset, 6th Jan.

C. A. Barnard, Esq. [C.].

## Megaloprepia puella (Less.).

Carpophaga puella, Macgillivray, Voy. Rattlesnake, ii. p. 358 (1852). Megaloprepia puella, Nehrkorn, J. f. O. 1885, p. 34; Salvadori, Cat. Birds B. M. xxi. p. 170 (1893); Sharpe, Hand-l. i. p. 63 (1899).

The egg of the Fairy Fruit-Pigeon in the Collection measures 1·23 by ·85, and is without gloss.

 Cape York, N. Australia (Capt. Voy. II.M.S. 'Rattlesnake.' Stanley).

## Sub-Family CARPOPHAGINÆ.

#### Genus CARPOPHAGA, Selby.

## Carpophaga insularis, Blyth.

Carpophaga insularis, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 367 (1890); Salvadori, Cat. Birds B. M. xxi. p. 185 (1893); Sharpe, Hand-l. i. p. 64 (1899).

The egg of the Nicobar Imperial Pigeon in the Collection measures 1.9 by 1.37, and possesses a small amount of gloss.

1. Trinkut Island, Nicobars, 17th Hume Coll. March (W. Davison).

## Carpophaga ænea (Linn.).

Carpophaga ænea, Sharpe, P. Z. S 1879, p. 348; Legge, Birds Ceyl. p. 718 (1879); Oates ed. Hume, Nests & Eygs Ind. B. ii. p. 366 (1890); Salvadori, Cat. Birds B. M. xxi. p. 190 (1893); Sharpe, Hand-l. i. p. 64 (1899).

The eggs of the Green Imperial Pigeon are fairly glossy, and measure from 1.6 to 1.85 in length, and from 1.25 to 1.32 in breadth.

1. Labuan, Borneo.

Sir Hugh Low [C.]. Hume Coll.

Port Blair, Andamans, 7th July (R. J. Wimberley).
 Thoungyin River. Tenasserim,

Hume Coll.

19th March (C. T. Bingham).

## Carpophaga rhodinolæma, Scl.

Carpophaga rhodinolæma. Sclater, Zool. 'Challenger' Exped. ii. pp. 31, 151 (1880); Salvadori, Cat. Birds B. M. xxi. p. 196 (1893); Sharpe, Hand-l. i. p. 64 (1899). The eggs of Sclater's Imperial Pigeon in the Collection measure respectively: 2·I by 1·3; 1·9 by 1·32; 1·9 by 1·34. They are slightly glossy.

3. Admiralty Islands.

Voy. II.M.S. 'Challenger.'

## Genus DUCULA, Hodgs.

#### Ducula cuprea (Jerd.).

Carpophaga cuprea, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 368 (1890); Salvadori, Cat. Birds B. M. xxi. p. 215 (1893).
Ducula cuprea, Sharpe, Hand-l. i. p. 66 (1899).

The eggs of Jerdon's Imperial Pigeon in the Collection are glossy, and measure respectively: 1.68 by 1.32; 1.73 by 1.26; 1.76 by 1.29.

 Kakencotte Forest, Mysore, 2nd Hume Coll. March (I. Macpherson).

2. Kakencotte Forest, 27th April Hume Coll. (I. Macpherson).

#### Ducula griseicapilla. Walden.

Carpophaga griseicapilla, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 369 (1890); Salvadori, Cat. Birds B. M. xxi. p. 217 (1893).
 Ducula griseicapilla, Sharpe, Hand-l. i. p. 66 (1899).

The egg of the Grey-headed Imperial Pigeon in the Collection is fairly glossy, and measures 1.61 by 1.15.

 Mooleyit Mountain, Tenasserim, 27th Jan. (W. Davison).

## Genus MYRISTICIVORA, Reichenh.

## Myristicivora bicolor (Scop.).

Carpophaga bicolor, Sharpe, P. Z. S. 1879, p. 348; Outes ed. Hume, Nests & Eggs Ind. B. ii. p. 369 (1890).

Myristicivora bicolor, Salvadori, Cat. Birds B. M. xxi. p. 227 (1893) Sharpe, Hand-l, i. p. 67 (1899).

Two eggs of the Pied Imperial Pigeon measure respectively: 1.78 by 1.25; 1.9 by 1.35. They are fairly glossy.

1. Trinkut Island, Nicobars, 4th Feb. Hume Coll. (Wimberley).

1. Labuan, Borneo, Feb. Sir Hugh Low [C.].

## Myristicivora spilorrhoa (Gray).

Myristicivora spilorrhoa, Gould, Handb. Birds Anstr. ii. p. 114 (1865); North, Nests & Egys Austr. Birds, p. 269 (1889); Salradori, Cat. Birds B. M. xxi. p. 231 (1893); Sharpe, Hand-l. i. p. 67 (1899).

The eggs of the White Nutmeg-Pigeon in the Collection measure respectively: 1.77 by 1.25; 1.85 by 1.27; 1.76 by 1.2; 1.8 by 1.25; 1.75 by 1.27. They have a moderate amount of gloss.

N.E. Australia (J. Macgillivray),

Cape York, N. Australia.

Fergusson Island, New Guinea. 12th Oct.

Gould Coll.

Gould Coll.

C. A. Barnard, Esq. [C.].

## Family COLUMBIDÆ.

## Sub-Family COLUMBINÆ.

#### Genus COLUMBA, Linn.

#### Columba livia. Bonn.

Columba livia, Thien. Fortpflanz. ges. Vög. p. 64, tab. xi. fig. 14 (1845-54): Buedeker, Eier Eur. Vög. tab. 67. fig. 7 (1855-63); Hewitson, Eggs of Brit. Birds, i. p. 274, pl. lxvii. fig. iii (1850); Dresser, Birds Eur. vii. p. 11 (1879); Seebohm, Brit. Birds, ii. p. 405, pl. 17 (1884); Salvadori, Cat. Birds B. M. xxi. p. 252 (1893); Seebohm, Eggs of Brit. Birds, p. 158, pl. 47, fig. 9 (1896); Sharpe, Hand-l. i. p. 69 (1899).

The eggs of the Rock-Dove are very glossy, and measure from 1.35 to 1.5 in length, and from 1.1 to 1.2 in breadth.

Faroe Islands, 19th June (H. C. Müller: Hargitt Coll.).

Faroe Islands (II. C. M.: Hargitt Coll.).

1. Orkneys. Island of Islay (Hargitt Coll.).

North Uist, 5th June (E. V. See-:3. bohm).

2. Breachy, Donegal, 15th May (H. Saunders). Donegal, 1st June (H. S.). 2.

Co. Waterford, 15th April. 1.

Co. Waterford, 4th May. Co. Waterford, 28th June. 2.

3. Bempton, Yorkshire.

Seville, Spain, April (Ruiz). 2.

Krasnovarsk, Siberia, 5th June (Kibort).

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll. Seebohm Coll.

Seebohm Coll.

Seebolim Coll.

Seebohm Coll.

R. J. Ussher, Esq. [P.].

R. J. Ussher, Esq. [P.]. R. J. Ussher, Esq. [P.].

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

## Columba intermedia, Strickl.

Columba intermedia, Legge, Birds Ceyl. p. 698 (1879); Oates ed. Humc. Nests & Eggs Ind. B. ii. p. 344 (1890); Salvadori, Cat. Birds B. M. xxi. p. 259 (1893); Sharpe, Hand-l. i. p. 69 (1899).

The eggs of the Indian Blue Rock-Pigeon measure from 1.3 to

1.65 in length, and from 1.05 to 1.25 in breadth, and are very glossy.

2.	Gurgaon District, 12th April.	Hume Coll.
2.	Gurgaon District, 13th April.	Hume Coll.
2.	Etawah, 19th Jan.	Hume Coll.
2.	Etawah, 28th Jan.	Hume Coll.
1.	Baraitch, 4th May.	Hume Coll.
8.	Bhurtpur, 29th Jan. (A. O. Hume).	Hume Coll.
1.	Sambhur, 7th March (R. M.	Hume Coll.
	Adam).	
1.	Sambhur, 20th March (R. M. A.).	Hume Coll.
1.	Sambhur, 25th March (R. M. A.).	Hume Coll.
5.	Sambhur, 28th March (R. M. A.).	Hume Coll.
2.	Sambhur, 1st April (R. M. A.).	Hume Coll,
9.	Sambhur, 5th April (R. M. A.).	Hume Coll.
2.	Jodhpur, 4th April.	Hume Coll.
10.	Dhola, Jodhpur, 5th April.	Hume Coll.

#### Columba œnas, Linn.

Columba cenas, Buedeker, EierEur. Vög. tab. 67. fig. 6 (1855-63); Hewitson, Eggs of Brit. Birds, i. p. 273, pl. lxvii. fig. ii (1856); Dresser, Birds Eur. vii. p. 23 (1876); Seebohm, Brit. Birds, ii. p. 401, pl. 17 (1884); Salvadori, Cat. Birds B. M. xxi. p. 261 (1893); Seebohm, Eggs of Brit. Birds, p. 158, pl. 47. fig. 7 (1896); Sharpe, Hand-l. i. p. 69.

The eggs of the Stock-Dove are very glossy and frequently tinged with a faint cream-colour. They measure from 1.4 to 1.5 in length, and from 1.15 to 1.2 in breadth.

2.	Mossford Wood, Loch Luichart, 24th May (W. McRae: Har-	Seebohm Coll.
2.	gitt Coll.). Wilstrop, Yorkshire (Hargitt Coll.). Derbyshire, 22nd April (H. See-	Seebohm Coll. Seebohm Coll.
2.	bohm). Little Eaton, Derbyshire, 23rd April (H. S.).	Seebolim Coll.

2. Edwinstow, 7th May (H. S.). Granchester, Cambridgeshire, 5th

April (O. Salvin).

Colefall Wood, Finchley (O. S.).

3. Cookham, Berkshire.

Avington Park, Hants, 14th May (E. Hargitt).

New Forest (Parsons). 2.

New Forest, 7th April (Fawen).

1.

Stolp, Pomerania, 8th May (T. Holland).

Seebohm Coll.

Salvin-Godman Coll.

Salvin-Godman Coll. Gould Coll.

Seebohm Coll,

Seebohm Coll. Seebohm Coll.

S. O. Sahlin, Esq. [P.]. Seebohm Coll.

COLUMBA. S9

#### Columba phæonota, G. R. Gray.

Columba phæonota, Sharpe's ed. Layard, Birds S. Africa, p. 559 (1875–84); Ayres, Ibis, 1877, p. 345; 1880, p. 109; Salvadori, Cat. Birds B. M. xxi. p. 268 (1893); Sharpe, Hand-l. i. p. 69 (1899).

The two eggs of the South-African Speckled Pigeon in the Collection differ greatly in size and measure respectively: 1.6 by 1.2; 1.35 by 1.05. They are moderately glossy.

1. S. Africa.

E. L. Layard, Esq. [P.]. T. Ayres, Esq. [P.].

I. Natal.

#### Columba leucocephala, Linn.

Columba leucocephala, Gosse, Birds Jamaica, p. 299 (1847); Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 363 (1874); Cory, Birds Bahama Is. p. 137 (1880); Bendire, Life Hist. N. A. Birds, i. p. 131, pl. iv. fig. 4 (1892); Salvadori, Cat. Birds B. M. xxi. p. 278 (1893); Sharpe, Hand-l. i. p. 70 (1899).

The egg of the White-crowned Pigeon, or Bald-pate, in the Collection measures 1:36 by 1:05, and is glossy.

1. Jamaica (Smiths. Inst.).

Salvin-Godman Coll.

#### Columba speciosa, Gm.

Columba speciosa, Scl. & Salr. P. Z. S. 1879, p. 543; Salvadori, Cat. Birds B. M. xxi. p. 281 (1893); Sharpe, Hand-l. i. p. 70 (1899).

The egg of the Scallop-necked Pigeon in the Collection is glossy and measures 1.48 by 1.05.

 Remedios, Antioquia, U.S. Colombia Salvin-Godman Coll. (T. K. Salmon).

#### Columba araucana, Less.

Columba araucana, James, New List of Chilian Birds, p. 10 (1892);
 Salvadori, Cat. Birds B. M. xxi. p. 296 (1893);
 Lane, Ibis, 1897,
 p. 297;
 Sharpe, Hand-l. i. p. 71 (1899).

The eggs of the Chilian Pigeon in the Collection are glossy, and measure respectively: 1.44 by 1.05; 1.5 by 1.15; 1.55 by 1.18; 1.62 by 1.15.

1. Central Chile (Landbeck).

Berkeley James Coll. Berkeley James Coll.

1. Chile, 15th December.

Purchased.

1. Chile.

E. G. Meade-Waldo, Esq. [P.].

1. Laid in confinement in England, July.

## Columba laurivora, Webb & Berth.

Columba laurivora, Dresser, Birds Eur. vii. p. 31 (1875); Salvadori, Cat. Birds B. M. xxi. p. 297 (1893); Sharpe. Hand-l. i. p. 71 (1899). 90 COLUMBID E.

An egg of the Canarian Pigeon measures 1.55 by 1.15, and is glossy.

E. G. Meade-Waldo, Esq. [P.]. 1. Laid in confinement in England.

#### Columba bollei, Godman,

Columba bollei, Dresser, Birds Eur. vii. p. 29 (1875); Reid, Ibis, 1877, p. 425; Koenig, J. f. O. 1890, p. 286, tab. viii. fig. 12; Salvadori, Cat. Birds B. M. xxi. p. 297 (1893); Sharpe, Hand-l. i. p. 71 (1899).

The egg of Bolle's Pigeon in the Collection measures 1.65 by 1.1 and is moderately glossy.

I. Laid in confinement (Zool, Gar- Zool, Society. dens, London).

#### Columba palumbus, Linn.

Columba palumbus, Thien. Fortpflanz. ges. Vög. p. 62, tab. xi. fig. 12 (1845-54); Salvin, Ibis, 1859, p. 318; Hewitson, Eggs of Brit. Birds, i. p. 271, pl. lxvii. fig. i (1856); Dresser, Birds Eur. vii. p. 3 (1878); Seebohm, Brit. Birds, ii. p. 396, pl. 17 (1884); Salvadori. Cat. Birds B. M. xxi. p. 299 (1893); Seebolem, Eggs of Brit. Birds. p. 157, pl. 47, fig. 8 (1896); Sharpe, Hand-l. i. p. 71 (1899).

Palumbus torquatus, Buedeker, Eier Eur. Vög. tab. 67. fig. 5 (1855-63).

The eggs of the Wood-Pigeon are very glossy, and measure from 1.55 to 1.7 in length, and from 1.15 to 1.35 in breadth.

Mossford, Loch Luichart (W. McRae: Seebohm Coll. Haraitt Coll.).

Half Glen, near Knockie (Hargitt Seebohm Coll. Coll.).

Seebohm Coll. Dochfour, Inverness-shire (Hargitt 2. Coll.).

North Berwick, Haddingtonshire, Seebohm Coll. 4. 23rd April (Hargitt Coll.).

Seebohm Coll. Allerton Park, Yorkshire, 24th May 2. (W. Harrison: Hargitt Coll.).

Wilstrop, Yorkshire, 28th May (T. Cass: Hargitt Coll.). Seebohm Coll.

Seebohm Coll. Harrogate, Yorkshire, 11th July 2. (H. Seebohm).

Ashopton, Derbyshire, 3rd April Seebohm Coll. 2.

(H. S.).

1. Maddingley, Cambridgeshire, 19th May (O. Salvin). 6. Cambridgeshire.

2. Colefall Wood, Finchley (O. Salvin).

Salvin-Godman Coll. Salvin-Godman Coll. Elveden, Suffolk, June (O. Salvin). 1. Seebohm Coll.

New Forest, 26th April (II. Saunders). Seebohm Coll. 2. Stolp, Pomerania, 20th May (T. Hol-

land). Stolp, 24th May (T. H.).

Stolp, 25th May (T. II.). 2.

2. Ain Djendeli, Algeria, 17th May (O. Salvin).

Ain Djendeli, 20th May (O. S.). 1.

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

F. Bond, Esq. [P.].

Salvin-Godman Coll.

#### Columba casiotis $(B_P)$ .

Palumbus easiotis, Oates ed, Hume, Nests & Eggs Ind. B. ii, p. 346 (1890). Columba casiotis, Salvadori, Cat. Birds B. M. xxi. p. 302 (1893); Dresser, Birds Eur. ix. (Suppl.) p. 299 (1896); Sharpe, Hand-l. i. p. 71 (1899).

The eggs of the Eastern Wood-Pigeon are glossy; three examples measure respectively: 1.55 by 1.12; 1.5 by 1.03; 1.55 by 1.05.

1. Himalavas, 16th June.

Hume Coll.

Agrore Valley, Punjab, 20th May (Col. Unwin).

Hume Coll.

## Columba elphinstonei (Sykes).

Palumbus elphinstonii, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 347 (1890).

Columba elphinstonei, Salvadori, Cat. Birds B. M. xxi. p. 304 (1893): Sharpe, Hand-l. i. p. 71 (1899).

The eggs of the Nilghiri Wood-Pigeon in the Collection are glossy and measure respectively: 1.45 by 1.06; 1.53 by 1.1; 1.51 by 1.18.

1. Nilghiris, June (W. Davison). Hume Coll.

2. Kotagherry, Nilghiris, 23rd June Hume Coll. (Miss Cockburn).

#### Columba ianthina. Temm.

Carpophaga ianthina, Seebohm, Birds Japan. Emp. p. 165 (1890). Columba janthina, Salvadori, Cat. Birds B. M. xxi. p. 310 (1893). Columba ianthina, Sharpe, Hand-l. i. p. 71 (1899).

The egg of the Japanese Wood-Pigeon in the Collection is glossy and measures 1.55 by 1.14.

 Chichishima, Japan, 6th June Seebohm Coll. (P. A. Holst).

## Sub-Family MACROPYGIINÆ.

#### Genus MACROPYGIA, Swains.

## Macropygia tusalia (Hodgs.).

Maeropygia tusalia, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 362 (1890); Salvadori, Cat. Birds B. M. xxi. p. 338 (1893); Sharpe, Hand-l. i. p. 73 (1899).

Two eggs of the Bar-tailed Coekoo-Dove in the Collection are moderately glossy and measure respectively: 1:37 by .95; 1:37 by 1.03. One is spotted with dull vellow, but this is undoubtedly due to stains.

2. Mongphoo, Darjiling, June (J. Gammic).

Hume Coll.

## Sub-Family ECTOPISTIN.E.

#### Genus ECTOPISTES, Swains.

#### Ectopistes migratorius (Linn.).

Columba migratoria, Thien. Fortpflanz. ges. Vög. p. 61, tab. xi. fig. 11 (1845-54).

Ectopistes migratorius, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 368 (1874); Bendire, Life Hist. N. A. Birds, i. p. 132, pl. iv. fig. 6 (1892); Salvadori, Cat. Birds B. M. xxi. p. 369 (1893); Seebohn, Eggs of Brit. Birds, p. 160, pl. 47. fig. 11 (1896); Sharpe, Hand-l. i. p. 76 (1899).

The eggs of the Passenger-Pigeon measure from 1.36 to 1.6 in length, and from 1.04 to 1.17 in breadth.\* They are moderately glossy.

Laid in confinement in England.
 Canada (Gale: Hargitt Coll.).

3. North America (Henshaw Coll.).

1. Rockford, Illinois (Blackman: Smiths. Inst.).

East Windsor Hill, U.S.A. (W. Wood: Smiths, Inst.).

Texas (H. E. Dresser).

II. Walter, Esq. [P.]. Seebohm Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

Seebohm Coll.

## Family PERISTERIDÆ.

## Sub-Family ZENAIDINÆ.

#### Genus ZENAIDURA, Bp.

## Zenaidura carolinensis (Linn.).

Zenaidura carolinensis, Baedeker, Eier Eur. Vög. tab. 67. fig. 10 (1855-63); Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 383 (1874); Salvadori, Cat. Birds B. M. xxi. p. 374 (1893); Sharpe, Hand-l. i. p. 76 (1899).

Zenaidura macroura, Bendire, Life Hist. N. A. Birds, i. p. 139, pl. iv. figs. 8, 9 (1892).

The eggs of the Carolina Dove are moderately glossy, and measure from 1.01 to 1.2 in length, and from .85 to .87 in breadth.

2. N. America (Henshaw Coll.). Salvin-Godman Coll.

N. America, 9th-15th May (Henshaw Salvin-Godman Coll.)

<sup>\*</sup> The eggs of this Pigeon figured by Thienemann measure only 1.2 by 9.

100 miles west of Fort Cobb. 5th June (C. S. McCarthy: Texas Bound. Survey).

1.

Pennsylvania (T. M. Brewer). Princeton, New Jersey, 22nd April. 2.

2. Princeton, 25th April. Salvin-Godman Coll.

Salvin-Godman Coll. Princeton University, N.J. [E.].

Princeton University, N.J. E. J.

## Genus ZENAIDA, $B\rho$ .

#### Zenaida meridionalis (Lath.).

Zenaida amabilis, Gosse, Birds Jamaica, p. 307 (1847); A. & E. Newton, Ibis, 1859, p. 253; Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 379 (1874); Cory, Birds Bahama Isls. p. 138 (1880); Salvadori, Cat. Birds B. M. xxi. p. 382 (1893).

Zenaida zenaida, Bendire, Life Hist, N. A. Birds, i. p. 143, pl. ii. fig. 21

(1892).Columba meridionalis, Salvadori, Cat. Birds B. M. xxi, p. 641 (1893). Zenaida meridionalis, Sharpe, Hand-l. i. p. 76 (1899).

The eggs of the Pea-Dove, or Zenaida Dove, in the Collection are glossy and measure respectively: 1.18 by .9; 1.2 by .86.

2. St. Croix, W. Indies (A. & E. Newton). Salvin-Godman Coll.

#### Zenaida auriculata (Des Murs).

Zenaida maculata, Scl. & Huds. Argent. Orn. ii. p. 141 (1889); Sharpe, Journ. Linn. Soc., Zool. xx. p. 479 (1890); Holland, Ibis, 1892. p. 209; James. New List of Chilian Birds, p. 10 (1892); Aplin, Ibis, 1894, p. 202.

Zenaida auriculata, Salvadori, Cat. Birds B. M. xxi. p. 384 (1893): Sharpe, Hand-l. i. p. 77 (1899).

The eggs of the Spotted Dove measure from 1.1 to 1.25 in length. and from .85 to .92 in breadth. They are moderately glossy.

Fernando Noronha Island. 1.

Fernando Noronha Island.

5. Uruguav.

Argentine Republic, Oct 5.

Central Chile.

Central Chile. 2. Central Chile.

2. Central Chile.

Central Chile.

H. N. Ridley, Esq. [P.].

II. N. Ridley, Esq. [P.].O. V. Aplin, Esq. [C.]. A. H. Holland, Esq. [C.].

Berkelev James Coll.

Berkeley James Coll.

Berkeley James Coll.

Berkeley James Coll.

Berkeley James Coll.

## Zenaida ruficauda, G. R. Gray.

Zenaida ruficanda, Scl. & Salv. P. Z. S. 1879, p. 543: Salvadori, Cat. Birds B. M. xxi. p. 387 (1893); Sharpe, Hand-l. i. p. 77 (1899).

An egg of the Rufous-tailed Dove in the Collection is of a pale cream-colour, measures 1.2 by .9, and is moderately glossy.

Medellin, Antioquia, U.S. Colombia Salvin-Godman Coll. (T. K. Salmon).

## Genus **MELOPELIA**, $B_{\rho}$ .

#### Melopelia leucoptera (Linn.).

Melopelia leucoptera, Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 376 (1874); Bendire, Life Hist. N. A. Birds, i. p. 145, pl. xi. fig. 23 (1892); Salvadori, Cat. Birds B. M. xxi. p. 392 (1893); Sharpe, Hand-l, i. p. 77 (1899).

Three eggs of the White-winged Dove in the Collection measure respectively: 1.25 by .91; 1.27 by .85; 1.19 by .85; and are moderately glossy.

N. America (Henshaw Coll.). 1. N. America (Smiths, Inst.).

Salvin-Godman Coll. Salvin-Godman Coll.

#### Sub-Family TURTURINÆ.

## Genus TURTUR, Selby.

#### Turtur turtur (Linn.).

Columba turtur, Thien. Fortpflanz. ges. Vog. p. 58, tab. xi. fig. 5 (1845-54); Hewitson, Eggs of Brit. Birds, i. p. 275, pl. lxvii. fig. iv (1856). Turtur auritus, Baedeker, Eier Eur. Vog. tab. 67. fig. 8 (1855-63); Salvin,

Ibis, 1859, p. 318; Seebohm, Brit. Birds, ii. p. 411, pl. 17 (1884); id. Eggs of Brit. Birds, p. 159, pl. 47, fig. 2 (1896).

Turtur vulgaris, Dresser, Birds Eur. vii. p. 39 (1876).

Turtur turtur, Sharpe, Ibis, 1891, p. 111; Salvadori, Cat. Birds B. M. xxi, p. 396 (1893); Sharpe, Hand-l. i. p. 77 (1899).

The eggs of the Turtle-Dove are moderately glossy, and measure from 1.1 to 1.25 in length, and from .85 to .95 in breadth.

Cambridgeshire 3. Colefall Wood, Finchley (O. S.).

Caen Wood, Hampstead (O. S.).

Suffolk (J. H. Morse). Valkenswaard, Holland, 12th May

(H. T. Wharton & H. Seebohm).

Valkenswaard, 24th May (H. T. W. & H. S.).

٠). Elbouf Forest, France (Noury). Dorpat, Baltic Provs. (Russow).

Stolp, Pomerania, 16th June (T. Hol-2. land).

Stolp, 16th June (T. H.).

Ain Djendeli, Algeria, May (O. Sal-

Fao, Persian Gulf, 16th May. 5.

Fao, 22nd May.

Jask, Gulf of Oman, April.

F. Bond, Esq. [P.].

Salvin-Godman Coll. Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Salvin-Godman Coll.

W. D. Cumming, Esq. [P.].

W. D. Cumming, Esq. P. J. S. Butcher, Esq. [P.].

## Turtur isabellinus, Bp.

Turtur sharpii, Shelley, Birds Egypt, p. 215 (1872).

Turtur isabellinus, Shelley, Birds Egypt, p. 216 (1872): Dresser, Birds Eur. vii. p. 49 (1877); Salvadori, Cat. Birds B. M. xxi. p. 400 (1893); Sharpe, Hand-l. i. p. 78 (1899).

The eggs of the Isabelline Turtle-Dove in the Collection are moderately glossy, and measure respectively: 1·1 by ·82; 1·03 by ·77; 1·04 by ·83.

Egypt, 16th April (Capt. Shelley). Seebohm Coll.

Soudan, 22nd April (W. V.). Colonel W. Verner [P.].

#### Turtur ferrago (Eversm.).

Turtur rupicola, Tacz. J. f. O. 1873, p. 97, tab. ii. fig. 30.

Turtur pulchratus, Legge, Birds Ceyl. p. 711 (1879).

1. Kotegurh, N.W. Himalayas,

Turtur pulchrala, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 349 (1890).
Turtur ferrago, Salvadori, Cat. Birds B. M. xxi. p. 401 (1893); Blant.
Fauna Brit. Ind., Birds, iv. p. 41 (1898); Sharpe, Hand-l. i. p. 78 (1899).

The eggs of the Indian Turtle-Dove are very glossy and measure from 1·1 to 1·35 in length, and from ·S5 to 1 in breadth.

Hume Coll.

	14th April.	
2.	Kotegurh, 16th April.	Hume Coll.
3.	Kotegurh, 17th April.	Hume Coll.
1.	Kotegurh, 16th May.	Hume Coll.
·).	Kotegurh, 30th May.	Hume Coll.
3.	Kotegurh, 31st May.	Hume Coll.
4.	Kotegurh, 7th June.	Hume Coll.
2.	Kotegurh, 10th June.	Hume Coll.
2.	Kotegurh, 11th June.	Hume Coll.
1.	Kotegurh, 13th June.	Hume Coll.
1.	Kotegurh, 16th June.	Hume Coll.
1.	Kotegurh, 21st June.	Hume Coll.
1.	Mussoorie (T. Hutton).	Hume Coll.

## Turtur orientalis (Lath.).

Turtur meena, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 350 (1890).
Turtur orientalis, Salvadori, Cat. Birds E. M. xxi. p. 403 (1893); Blanf. Fauna Brit. Ind., Birds, iv. p. 40 (1898); Sharpe, Hand-l. i. p. 78 (1899).

The eggs of the Rufous Turtle-Dove are moderately glossy and measure from 1:06 to 1:15 in length, and from :85 to :95 in breadth.

6. Raipur, India (F. R. Blewitt). Hume Coll.

#### Genus HOMOPELIA, Salvad.

## Homopelia picturata (Temm.).

Turtur picturatus, Cowan, Proc. R. Phys. Soc. Edin. vii. p. 149 (1882);
Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. p. 400, pl. 303, fig. 11 (1885);
Salvadori, Cat. Birds B. M. xxi. p. 409 (1893).
Homopelia picturata, Sharpe, Hand-l. i. p. 78 (1899).

The eggs of the Painted Dove measure from 1.22 to 1.36 in length, and from .88 to 1 in breadth, and are moderately glossy.

6. Betsileo, Madagascar.

Rev. W. Deans Cowan [C.].

#### Genus STREPTOPELIA, Bp.

## Streptopelia semitorquata (Rüpp.).

Turtur semitorquatus, Sharpe's ed. Layard, Birds S. Africa, p. 566 (1875-84); Salradori, Cat. Birds B. M. xxi. p. 416 (1893). Streptopelia semitorquata, Sharpe, Hand-l. i. p. 78 (1899).

The eggs of the Red-eyed Turtle-Dove measure from 1.07 to 1.2 in length, and from .85 to .92 in breadth, and are rather highly glossy.

3. S. Africa.

2. S. Africa.

3. Natal.

Gould Coll.

E. L. Layard, Esq. [P.].

Capt. Savile Reid [P.].

#### Streptopelia dussumieri (Temm.).

Turtur dussumieri, Steere, List Birds & Mamm. Philip. p. 24 (1890);
Salvadori, Cat. Birds B. M. xxi. p. 423 (1893).
Streptopelia dussumieri, Sharpe, Hand-l. i. p. 79 (1899).

The eggs of Dussumier's Turtle-Dove in the Collection measure respectively: 1·2 by ·92; 1·23 by ·92. They are almost without gloss.

2. Negros, Philippines, 13th Feb.

Steere Exped.

## Streptopelia capicola (Finsch & Hartl.).

Turtur semitorquatus (nec Rüpp.), Gurney, Ibis, 1860, p. 214. Turtur capicola, Sharpe's ed. Layard, Birds S. Africa, p. 567 (1875-84); Salvadori, Cat. Birds B. M. xxi. p. 424 (1893). Streptopelia capicola, Sharpe, Hand-l. i. p. 79 (1899).

Two eggs of the Cape Turtle-Dove in the Collection are very glossy and measure respectively: 1·4 by ·87; 1·15 by ·88.

2. Transvaal (T. Ayres).

Seebohm Coll.

## Streptopelia douraca (Hodgs.).

Columba risoria, Thien. Fortpftanz. ges. Vög. p. 60, tab. xi. fig. 8 (1845–54).

Streptopelia risoria, Baedeker, Eier Eur. Vög. tab. 67. fig. 9 (1855-63).
Turtur risorius, Layard, Ann. § Mag. N. II. (2) xiv. p. 59 (1854); Beavan,
P. Z. S. 1864, p. 376; Tristram, Ibis, 1868, p. 211; Dresser, Birds
Eur. vii. p. 51 (1877); Oates ed. Hume, Nests § Eggs Ind. B. ii.
p. 357 (1890); Blanf. Fauna Brit. Ind., Birds, iv. p. 46 (1898).

p. 357 (1890); Bland. Fauna Brit. Ind., Birds, IV. p. 40 (1 Turtur douraea, Salvadori, Cat. Birds B. M. xxi. p. 430 (1893).

Streptopelia douraca, Sharpe, Hand-l. i. p. 79 (1899).

The eggs of the Indian Ring-Dove in the Collection possess a comparatively small amount of gloss, and measure from 1.05 to 1.25 in length, and from .85 to 1 in breadth.

1.	Palestine ( $H. B. Tristram$ ).	Salvin-Godman Coll.
2.	Palestine (H. B. T.).	Seebohm Coll.
$^{2}.$	Jericho, April (H. B. T.).	Seebohm Coll.
$^2$ .	Jericho, 21st May (H. B. T.).	Seebohm Coll.
4.	Sind.	Gould Coll.
3.	Ahmedabad, 23rd April.	Hume Coll.
1.	Rajputana, 14th April.	Hume Coll.
12.	Jodhpur, 1st-5th April.	Hume Coll.
2.	Jeypur, 23rd March.	Hume Coll.
14.	Gurgaon Distr., 12th April.	Hume Coll.
2.	Gurgaon Distr., 28th March.	Hume Coll.
$^{2}.$	Bhurtpur, 28th Jan.	Hume Coll.
2.	Agra, 26th July.	Hume Colt.
$^2$ .	Agra, 11th Aug.	Hume Coll.
1.	Allygurh, July.	Hume Coll.
15.	Etawah, Jan. to March.	Hume Coll,
1.	Futtehpur Sikri, 31st Jan.	Hume Coll.
4.	Allahabad.	Hume Coll.
2.	Bareilly, 23rd June.	Hume Coll.
1.	Maunbhoom, April (R. C. Beavan).	Salvin-Godman Coll.

#### Genus **ENOPOPELIA**, Blanf.

Salvin-Godman Coll.

Hume Coll.

## Enopopelia tranquebarica (Herm.).

Turtur tranquebaricus, Leyge, Birds Ceyl. p. 708 (1879); Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 359 (1899); Salvadori, Cat. Birds B. M. xxi. p. 437 (1893).

Œnopopelia tranquebarica, Blanf. Fauna Brit. Ind., Birds, iv. p. 47, part. (1898).

Onopopelia tranquebarica, Sharpe, Hand-l. i. p. 79 (1899).

1. Ceylon (E. L. Layard).

Sikhim Terai, 15th March.

The eggs of the Indian Red Turtle-Dove are tinged with faint cream-colour. They measure from '98 to 1.1 in length, and from '75 to '85 in breadth, and are highly glossy.

~.	Chillian I ditti, I ditti Chi.	TIME COM,
$^{2}.$	Sikhim Terai, 16th April.	Hume Coll.
2.	Sikhim Terai, 14th May.	Hume Coll.
1.	Gurgaon District, 12th April.	Hume Coll.
2.	Allygurh, July.	Hume Coll.
1.	Etawah, 11th April (W. E. Brooks).	Hume Coll.
1.	Bareilly, 8th May.	Hume Coll.
1.	Bareilly, 25th May.	Hume Col.,
2.	Bareilly, 26th May.	Hume Coll.
1.	Bareilly, 3rd June.	Hume Coll.
2.	Bareilly, 7th June.	Hume Coll.
1.	Bareilly, 13th June.	Hume Coli.
2.	Futtehpur Sikri, 31st Jan.	Hume Coll.
1.	Nilghiris, May.	Hume Coll.

1.

6.

Labuan.

#### Genus SPILOPELIA, Sundev.

## Spilopelia chinensis (Scop.).

Turtur chinensis, Swinh. Ibis, 1863, p. 397; Salvadori, Cat. Birds B. M. xxi. p. 439 (1893).

Spilopelia chinensis, Śharpe, Hand-l. i. p. 80 (1899).

Formosa, 21st Oct. (P. A. H.).

The eggs of the Chinese Spotted Dove have a moderate amount of gloss. They measure from 1·1 to 1·24 in length, and from ·85 to ·9 in breadth.

South China (R. Swinhoe).
 South China (R. S.).
 Foochow, March.
 Formosa, 13th April (P. A. Holst).
 Formosa, 20th Aug. (P. A. H.).
 Formosa, 25th Aug. (P. A. H.).
 Seebohm Coll.
 Seebohm Coll.
 Seebohm Coll.
 Seebohm Coll.

## Spilopelia tigrina (Temm. & Knip).

Seebohm Coll.

Sir Hugh Low [C.].

Columba chinensis, Thien. Fortpflanz. ges. Vög. p. 59, tab. xi. fig. 6 (1845-54).

Spilòpelia tigrina, Sharpe, P. Z. S. 1879, p. 349; id. Hand-l. i. p. 80 (1899).

Turtur tigrinus, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 356 (1890): Salvadori, Cat. Birds B. M. xxi. p. 440 (1893).

The eggs of the Malay Spotted Dove are mostly very glossy, and measure from 1.05 to 1.25 in length, and from .8 to .9 in breadth.

Pegu, 20th June (E. W. Oates). Hume Coll. ī. Pegu, 2nd Aug. (E. W. O.). Hume Coll. Pegu, 20th Sept. (E. W. O.). 1. Hume Coll. Pegu, 1st Nov. (E. W. O.). Pegu, 6th Dec. (E. W. O.). Pegu, 28th Dec. (E. W. O.). Hume Coll. Hume Coll. Hume Coll. Pegu, 26th Jan. (E. W. O.). Hume Coll. Pegu, 1st Oct. (E. W. O.). Pegu, 19th Dec. (E. W. O.). Pegu, 11th Jan. (E. W. O.). Oates Coll. 1. Oates Coll. 1. Oates Coll. Pegu, 1st Nov. (E. W. O.).
Thoungvin River, Tenasserim,
14th Feb. (C. T. Bingham). 1. Seebohm Coll. 2. Hume Coll. 2. Thoungyin River, 27th March Hume Coll. (C. T. B.).Thoungvin River, 19th April (C. T. B.). 1. Hume Coll. Tavoy, Tenasserim, 15th March 2. Hume Coll. (J. Darling). Pakchan, Tenasserim, 21st Jan. Hume Coll. ( W. Davison).

## Spilopelia suratensis (Gm.).

Turtur suratensis, Layard, Ann. & Mag. Nat. Hist. (2) xiv. p. 60 (1854); Legge, Birds Ceyl. p. 705 (1879); Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 353 (1890); Salvadori, Cat. Birds B. M. xxi. p. 444 (1893). Spilopelia suratensis, Sharpe, Hand-l. i. p. 80 (1899).

The eggs of the Indian Spotted Dove are fairly glossy, and measure from .95 to 1.2 in length, and from .75 to .95 in breadth.

1.	Kotegurh, N.W. Himalayas, May.	Hume Coll.
1.	Jerripani.	Hume Coll.
3.	Mongphoo, Sikhim (J. Gammie).	Hume Coll.
1.	Terai, 24th March.	Hume Coll.
1.	Terai, 21st April.	Hume Coll.
1.	Terai, 26th April.	Hume Coll.
1.	Terai, 2nd May.	Ilume Coll.
2.	Terai, 11th Sept.	Hume Coll.
:;.	Lucknow, 21st April.	Hume Coll.
1.	Lucknow, 9th Aug.	Hume Coll.
2.	Lucknow, 4th Sept.	Hume Coll.
1.	Lucknow, 15th Sept.	Hume Coll.
1.	Bareilly, 28th May.	Hume Coll.
1.	Mundla, 6th April.	Hume Coll.
1.	Nilghiris, May.	Hume Coll.
Ι.	Kotagherry, Nilghiris, 16th March	Hume Coll.
	(Miss Cockburn).	
Ι.	Kotagherry, 16th April (Miss	Hume Coll.
	Cockburn).	
1.	Kotagherry, 15th May (Miss	Hume Coll.
	Coekburn).	
1.	Ceylon (E. L. Layard).	Salvin-Godman Coll.

## Genus STIGMATOPELIA, Sundev.

## Stigmatopelia senegaleusis (Linn.).

Columba senegalensis, Thien. Fortpflunz. ges. Vög. p. 59, tab. xi. fig. 7 (1845-54).

Turtur ægyptiacus, Bacdeker, Eier Eur. Vög. tab. 67. fig. 11 (1855-63).

Columba ægyptiaca, Bree, Birds Eur. iii. p. 195, pl. — (1867). Turtur senegalensis, Tristram, Ibis, 1868, p. 211; Ayres, Ibis, 1871, p. 261; Shelley, Birds Eyypt, p. 217 (1872); Bree, Birds Eur. 2nd ed. iv. p. 106, pl. — (1875); Dresser, Birds Eur. vii. p. 55 (1876); Sharpe's ed. Layard, Birds S. Africa, p. 568 (1875-84); Salvadori,

Cat. Birds B. M. xxi. p. 448 (1893). Stigmatopelia senegalensis, Sharpe, Hand-l. i. p. 80 (1899).

The eggs of the Egyptian Turtle-Dove have a fair amount of gloss and are very variable in size, measuring from .98 to 1.13 in length, and from .75 to .9 in breadth.

Fuerteventura, Canary Is. Capt. Savile Reid [P.]. Jericho, 18th April (H. B. Tristram). Salvin-Godman Coll. Egypt, Feb. (S. S. Allen). Salvin-Godman Coll. 1. Egypt, March (S. S. A.). Salvin-Godman Coll. 1. Egypt (J. H. C. & S. S. A.). J. H. Cochrane, Esq., P., Egypt, 27th March (G. E. Shelley). Seebohm Coll.

2. Egypt, 30th March (G. E. S.). Seebohm Coll.

1. South Africa. 2. Transyaal, 16th July (*T. Ayres*). E. L. Layard, Esq. [P.]. Seebohm Coll.

 Dahamis, Sokotra, 22nd Dec. (W. R. Royal Society [P.]. Ogiivie Grant & H. O. Forbes).

 Dahamis, 22nd Dec. (W. R. O. G. & Royal Society [P.]. H. O. F.).

## Stigmatopelia cambayensis (Gm.).

Turtur cambayensis, Baedeker, Eier Eur. Vög. tab. 67. fig. 12 (1855-63);
Bearan, P. Z. S. 1864, p. 376; Salvadori, Cat. Birds B. M. xxi.
p. 451 (1893); Dresser, Birds Eur. ix. (Suppl.) p. 305 (1896).
Turtur senegalensis, Oates ed. Hume, Nests & Egys Ind. B. ii. p. 351 (1890).
Stigmatopelia cambayensis, Sharpe, Hand-l. i. p. 80 (1899).

The eggs of the Little Brown Dove are very glossy, and measure from ·SS to 1·2 in length, and from ·75 to ·9 in breadth.

 Kotegurh, N.W. Himalayas, 16th & Hume Coll. 17th April.

2. Jerripani, Mussoorie. Hume Coll. 2. Sind. Gould Coll.

Rajputana, 14th April. Hume Coll.
Jodhpur, 1st April. Hume Coll.

Jodhpur, 2nd April.
 Jodhpur, 3rd April.
 Hume Coll.
 Hume Coll.

6. Jodhpur, 3rd April. Hume Coll. 4. Ahmedabad, 21st April. Hume Coll.

2. Gurgaon Distr., 28th March. Hume Coll.

2. Kootub, 14th April. Hume Coll.
1 Agra, 25th July. Hume Coll.

Agra, 25th July.
 Etawah, 27th Jan. (A. O. Hume).
 Hume Coll.
 Hume Coll.

1. Etawah, 28th Feb. (A. O. H.). Hume Coll.

1. Etawah, 4th March (A. O. II.). Hume Coll.

2. Etawah, 6th April (A. O. H.). Hume Coll.

2. Etawah, 10th April (A. O. H.). Hume Coll.

3. Etawah, 13th April (A. O. H.). Hume Coll.

3. Etawah, 17th April (A. O. H.). Hume Coll. I. Lucknow, 5th July. Hume Coll.

2. Lucknow, 9th Sept. Hume Coll.

2. Maunbhoom (R. C. Bearan). Salvin-Godman Coll.

2. Salem, Madras, 15th July. Hume Coll.

. Salem, Aug. Hume Coll.

## Sub-Family GEOPELIINÆ.

#### Genus GEOPELIA, Swains.

## Geopelia humeralis (Temm.).

Erythrauchæna humeralis, Gould, Handb. Birds Austr. ii. p. 142 (1865); Campbell, Nests & Lygs Austr. Birds, p. 49 (1883); North, Nests & Eggs Austr. Birds, p. 277 (1889).

Geopelia humeralis, Salvadori, Cat. Birds B. M. xxi. p. 455 (1893); Sharpe, Hand-l. i. p. 80 (1899). The single egg of the Barred-shouldered Dove in the Collection measures 1.17 by ·8, and is almost glossless.

 Lizard Island, N.E. Australia, Gould Coll. Aug. (J. Macgillivray).

#### Geopelia striata (Linn.).

Columba striata, Thien. Fortpflanz. ges. Vög. p. 60, tab. xi. fig. 10 (1845–54).

Geopelia striata, Hume & Dav. Stray Feath, vi. p. 423 (1878); Milne-Edwards & Grandidier, Hist. Nat. Maday., Ois. ii. p. 469, pl. 303, fig. 10 (1885); Salvadori, Cat. Birds B. M. xxi. p. 458 (1893): Sharpe, Hand-l. i. p. 80 (1899).

The single egg of the Barred Ground-Dove in the Collection measures 82 by 64, and is slightly glossy.

1. Tonka Island, Malay Peninsula, Hume Coll. 4th Feb. (W. Davison).

## Sub-Family PERISTERINÆ.

#### Genus COLUMBULA, $B_p$ .

## Columbula picui (Temm.).

Columbula picui, Scl. & Huds. Argent. Orn. ii. p. 143 (1889); Holland, Ibis, 1892, p. 209; Salvadori, Cat. Birds B. M. xxi. p. 470 (1893); Sharpe, Hand-l. i. p. 81 (1899).

The eggs of the Picui Dove are glossy, and measure from 9 to 97 in length, and from 65 to 7 in breadth.

5. Argentine Republic, Oct.

A. H. Holland, Esq. [C.].

## Genus CHAMÆPELIA, Swains.

## Chamæpelia passerina (Linn.).

Chamæpelia passerina, Scl. & Salv. Ibis, 1859, p. 223; 1860, p. 45;
Baird, Brewer & Ridgw. N. Amer. Birds, iii. p. 389 (1874); Cory,
Birds Bahama Isls. p. 139 (1880); Reid, Bull. U.S. Nat. Mus.
no. 25, p. 225 (1884); Feilden, Ibis, 1889, p. 490; Salradori, Cat.
Birds B. M. xxi. p. 473 (1893); Sharpe, Hand-l. i. p. 81 (1899).

Chamæpelia trochila, A. & E. Newton, Ibis, 1859, p. 253.
Columbigallina passerina, Bendire, Life Hist. N. A. Birds, i. p. 148 (1892).

The eggs of the American Ground-Dove are highly glossy, and vary from '8 to '95 in length, and from '62 to '67 in breadth.

8. N. America.

2. Texas (Smiths. Inst.).

1. Dueñas, Guatemala, 7th March (O. Salvin).

Salvin-Godman Coll. Salvin-Godman Coll. Salvin-Godman Coll. St. Croix, W. Indies (A. & E. Newton). Salvin-Godman Coll.

St. Croix, 26th June (A. & E. N.). Salvin-Godman Coll.

3. Jamaica. 8. Barbados, May. H. B. Hutton, Esq. [P.]. Col. H. W. Feilden [P.].

Bermuda.

Capt. Savile Reid [P.].

## Chamæpelia cruziana (d'Orb.).

Chamæpelia cruziana, Scl. P. Z. S. 1867, p. 989; Salvadori, Cat. Birds B. M. xxi. p. 483 (1893); Sharpe, Hand-l. i. p. 82 (1899).

The single egg of the Garnet-banded Dove in the Collection measures 1 by 72, and is very glossy.

Peru (H. Whitely).

Salvin-Godman Coll.

#### Genus METRIOPELIA, $B_P$ .

#### Metriopelia melanoptera (Mol.).

Metriopelia melanoptera, Scl. & Huds. Argent. Orn. ii. p. 142 (1889); James, New List of Chilian Birds, p. 10 (1892); Salvadori, Cat. Birds B. M. xxi. p. 497 (1893); Sharpe, Hand-l. i. p. 83 (1899).

The three eggs of the Black-winged Dove in the Collection measure respectively: 1.04 by 83; 1.01 by 8; 1.08 by 78, and are very glossy.

2. Central Chile, Nov.

Berkeley James Coll. Berkeley James Coll.

1. Central Chile, Nov.

## Sub-Family PHABINÆ.

## Genus ŒNA, Selby.

## Œna capensis (Linn.).

Œna capensis, Sharpe's ed. Layard, Birds S. Africa, p. 572 (1875-84); Cowan, Proc. R. Phys. Soc. Edin. vii. p. 149 (1882); Milie-Edwards & Grandidier, Hist. Nat. Maday., Ois. ii. p. 465 (1885); Salvadori, Cat. Birds B. M. xxi. p. 501 (1893); Sharpe, Hand-l. i. p. 83 (1899).

The eggs of the Long-tailed African Dove are cream-coloured. Two specimens, however, from Madagascar are pale bluish white, of unusually large size and of a pointed oval shape. The authenticity of these may be questioned. They measure 91 by 64 and ·95 by ·65 respectively. The other examples in the Collection measure 'S by '6. They have a moderate amount of gloss.

Africa. 1.

S. Africa.
 Soudan, 2

Soudan, 22nd April. Betsileo, Madagascar.

Old Collection.

E. L. Lavard, Esq. [P.]. Col. W. Verner [P.]. Rev. W. Deans Cowan [P.].

#### Genus TYMPANISTRIA, Reichenb.

## Tympanistria tympanistria (Temm. & Knip).

Peristera tympanistria, Gurney, Ibis, 1860, p. 214.

Tympanistria tympanistria, Sharpe's ed. Layard, Birds S. Africa, p. 571 (1884); Salvadori, Cat. Birds B. M. xxi. p. 504 (1893); Sharpe, Hand-l. i. p. 83 (1899).

The sole egg of the White-breasted Wood-Dove in the Collection is cream-coloured and measures '95 by '73. It has very little gloss.

I. Natal.

T. Ayres, Esq. [C.].

#### Genus CHALCOPHAPS, Gould.

#### Chalcophaps chrysochlora, Wagler,

Chalcophaps chrysochlora, Gould, Handb. Birds Austr. ii. p. 118 (1865); North, Nests & Eggs Austr. Birds, p. 271 (1889); Salvadori, Cat. Birds B. M. xxi. p. 511 (1893); Sharpe, Hand-l. i. p. 83 (1899).

The three eggs of the Australian Bronze-winged Dove are glossy and measure respectively: 1·15 by ·85; 1·18 by ·89; 1·15 by ·87.

Moreton Bay, N.E. Australia.
 Port Essington, N. Australia.

Gould Coll. Gould Coll.

# Chalcophaps indica (Linn.). (Plate VIII. figs. 2 & 3.)

Chalcophaps indica, Legge, Birds Ceyl. p. 714 (1879); Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 363 (1890); Steere, List Birds & Mamm. Philip. p. 24 (1890); Salvadori, Cat. Birds B. M. xxi. p. 514 (1893); Sharpe, Hand-l. i. p. 84 (1899).

The eggs of the Indian Bronze-winged Dove are either pure white or cream-coloured. They measure from 1.02 to 1.19 in length, and from .78 to .9 in breadth, and are highly glossy.

Mussoorie (T. Hutton).
 Curzon, Nilghiris, 3rd May.
 Curzon, 5th May.
 Nicobars, 17th Feb. (W. Davison).
 Nicobars, 1st March (W. D.).
 Sinzaway, Tenasserim, 28th April

 (C. T. Bingham).

 Hume Coll.
 Hume Coll.
 Hume Coll.
 Hume Coll.

Klang, Malay Peninsula (W. D.).
 Mindoro Isl., Philippines, June.

Hume Coll. Steere Exped.

## Genus PHAPS, Selby.

## Phaps chalcoptera (Lath.).

Columba chalcoptera, Thien. Fortpflanz. ges. Vög. p. 56, tab. xi. fig. 1 (1845-54). Peristera chalcoptera, Baedeker, Eier Eur. Vög. tab. 67. fig. 14 (1855–63). Phaps chalcoptera, Gould, Handb. Birds Austr. ii. p. 122 (1865); Campbell, Nests & Eggs Austr. Birds, p. 48 (1883); North, Nests & Eggs Austr. Birds, p. 273 (1889); Salvadori, Cat. Birds B. M. xxi. p. 526 (1893); Sharpe, Hand-l. i. p. 84 (1899).

The four eggs of the Common Australian Bronze-winged Dove in the Collection are glossy and measure respectively: 1.37 by .97; 1.35 by .97; 1.4 by 1; 1.35 by 1.

1. Australia.

Salvin-Godman Coll.

Australia.
 S. Australia.

Gould Coll. Gould Coll.

## Phaps elegans (Temm. & Knip).

Phaps elegans, Gould, Handb. Birds Austr. ii. p. 125 (1865): Campbell, Nests & Eggs Austr. Birds, p. 49 (1883): North, Nests & Eggs Austr. Birds, p. 274 (1889); Salvadori, Cat. Birds B. M. xxi. p. 527 (1893); Sharpe, Hand-l. i. p. 84 (1899).

The four eggs of the Brush Bronze-winged Dove in the Collection are glossy and measure respectively: 1.35 by .95; 1.3 by .95; 1.28 by .94; 1.36 by .92.

4. Australia.

Gould Coll.

#### Genus HISTRIOPHAPS, Salvad.

## Histriophaps histrionica (Gould).

Phaps histrionica, Gould, Handb. Birds Austr. ii. p. 127 (1865); North, Nests & Eggs Austr. Birds, p. 274 (1889).

Histriophaps histrionica, Salvadori, Cat. Birds B. M. xxi. p. 529 (1893); Sharpe, Hand-l. i. p. 84 (1899).

The two eggs of the Harlequin Bronze-winged Dove in the Collection measure respectively: 1.28 by 1; 1.23 by 9, and are moderately glossy.

1. Interior of Australia (White).

Gould Coll.

1. Australia (White).

Gould Coll.

## Genus GEOPHAPS, Gould.

## Geophaps scripta (Temm.).

Geophaps scripta, Gould, Handb. Birds Austr. ii. p. 130 (1865): Campbell, Nests & Egys Austr. Birds, p. 49 (1883); North, Nests & Egys Austr. Birds, p. 275 (1889); Salvadori, Cat. Birds B. M. xxi. p. 531 (1893); Sharpe, Hand-l. i. p. 85 (1899).

The eggs of the Partridge Bronze-winged Dove are glossy, and measure from 1·12 to 1·27 in length, and from ·85 to ·93 in breadth.

3. Australia.

Gould Coll. Gould Coll.

Liverpool Plains, Australia.
 Laid in confinement (Zoologica)

1. Laid in confinement (Zoological Gardens, London).

Zool. Society.

#### Genus OCYPHAPS, Gould.

## Ocyphaps lophotes (Temm.).

Oeyphaps lophotes, Baedeker, Eier Eur. Vög. tab. 67. fig. 13 (1855-63); Gould, Handb. Birds Austr. ii. p. 139 (1865); Campbell, Nests & Eggs Austr. Birds, p. 49 (1883); North, Nests & Eggs Austr. Birds, p. 277 (1889); Salvadori, Cat. Birds B. M. xxi. p. 535 (1893); Sharpe, Hand-l. i. p. 85 (1899).

The eggs of the Crested Bronze-winged Dove are glossy, and measure from 1.22 to 1.27 in length, and from .9 to .96 in breadth.

1. Australia. Gould Coll. 1. Australia, June. Gould Coll. S. Australia. Gould Coll. 1. Australia. Salvin-Godman Coll.

## Sub-Family GEOTRYGONINÆ.

#### Genus LEPTOPTILA, Swains.

#### Leptoptila fulviventris, Lawr.

Leptoptila albifrons, Scl. & Salv. Ibis, 1859, p. 222.

Engyptila albifrons, Bendire, Life Hist. N. A. Birds, i. p. 144, pl. ii. fig. 22 (1892).

Leptoptila brachyptera, Salvadori, Cat. Birds B. M. xxi. p. 545 (1893). Leptoptila fulviventris, Sharpe, Hand-l. i. p. 86 (1899).

The sole egg of the White-fronted Dove in the Collection measures 1.45 by 1.02, and is moderately glossy.

 Dueñas, Guatemala, 31st May. Salvin-Godman Coll.

## Leptoptila cerviniventris, Scl. & Salv.

Leptoptila cerviniventris, Salvadori, Cat. Birds B. M. xxi. p. 561 (1893); Sharpe, Hand-l. i, p. 87 (1899).

The eggs of the Vinous-bellied Dove in the Collection are moderately glossy, creamy white in colour, and measure respectively: 1.15 by .88: 1.17 by .86.

2. Cayo, British Honduras, June Salvin-Godman Coll. (F. Blancaneaux).

#### Genus GEOTRYGON, Gosse.

#### Geotrygon montana (Linn.). (Plate VIII. fig. 1.)

Geotrygon montana, Gosse, B. Jamaica, p. 320 (1847); Lister, Ibis, 1880, p. 43; Bendire, Life Hist. N. A. Birds, i. p. 154, pl. ii. fig. 26 (1892); Salvadori, Cat. Birds B. M. xxi. p. 567 (1893); Sharpe, Hand-l. i. p. 87 (1899).

Geotrygon montanus, Salv. & Scl. Ibis, 1860, p. 401.

The eggs of the Ruddy Quail-Dove vary from cream-colour to salmon-buff, are moderately glossy, and measure from 1.04 to 1.16 in length, and from .83 to .9 in breadth. It has not been recorded that the eggs of this Dove are ever white, but they probably are of that colour when first laid.

N. America.
 H. F. Walter, Esq. [P.].
 San Christobal, Cuba (G. F. Gaumer).
 Salvin-Godman Coll.

3. Guatemala. Salvin-Godman Coll.

#### Genus PHLOGŒNAS, Reichenb.

#### Phlogenas samoensis, Finsch.

Phlegœnas stairi, Whitmee, Ibis, 1875, p. 445.

Phlogenas samoensis, Salvadori, Cat. Birds B. M. xxi. p. 596 (1893); Sharpe, Hand-l. i. p. 89 (1899).

The egg of Stair's Ground-Dove in the Collection measures  $1\cdot24$  by  $\cdot93$ , and is almost glossless.

1. Samoa.

Rev. S. J. Whitmee [C.].

#### Genus LEUCOSARCIA, Gould.

#### Leucosarcia picata (Lath.).

Leucosarcia picata, Gould, Handb. Birds Austr. ii. p. 120 (1865); Campbell, Nests & Egys Austr. Birds, p. 48 (1883); North, Nests & Egys Austr. Birds, p. 272 (1889); Salvadori, Cat. Birds B. M. xxi. p. 607 (1893); Sharpe, Hand-l. i. p. 90 (1899).

The two eggs of the Wonga-wonga Pigeon in the Collection measure respectively: 1.6 by 1.18; 1.62 by 1.15, and have little or no gloss.

2. Moreton Bay, N.E. Australia.

Gould Coll.

## Sub-Family CALŒNADINÆ.

## Genus CALŒNAS, Gray.

## Calænas nicobarica (Linn.).

Calcenas nicobarica, Oates ed. Hume, Nests & Eggs Ind. B. ii. p. 365 (1890); Salvadori, Cat. Birds B. M. xxi. p. 615 (1893); Sharpe, Hand-l. i. p. 91 (1899).

The two eggs of the Nicobar Pigeon in the Collection are glossy, and measure respectively: 1.84 by 1.25; 1.7 by 1.32.

- Batty Malve, Nicobars, 18th March Hume Coll. (W. Davison).
- 1. Louisiade Archipelago, New Guinea. Zool. Society.

## Family GOURIDÆ.

#### Genus GOURA, Steph.

#### Goura coronata (Linn.).

Goura coronata, Wallace, Ibis, 1865, p. 395; Salvadori, Cat. Birds B. M. xxi. p. 620 (1893); Sharpe, Hand-l. i. p. 91 (1899).

The egg of the Common Crowned Pigeon in the Collection measures  $2 \cdot 27$  by  $1 \cdot 62$ , and is moderately glossy.

 Laid in confinement (Zool. Gardens, Zool. Society. London).

#### Goura victoria (Fraser).

Goura victoria, Meyer, Sitz. u. Abh. Ges. Isis, 1884, Abh. i. p. 52; Salvadori, Cat. Birds B. M. xxi. p. 624 (1893); Sharpe, Hand-l. i. p. 91 (1899).

The egg of the Victoria Crowned Pigeon in the Collection is glossy, and measures 1.95 by 1.45.

 Laid in confinement (Zool. Gardens, Salvin-Godman Coll. London).

## Family DIDUNCULIDÆ.

## Genus DIDUNCULUS, Peale.

## Didunculus strigirostris (Jard.).

Didunculus strigirostris, Finsch & Hartl. Fauna Centralpolyn. p. 150, t. iii. fig. 1 (1867); Newton, P. Z. S. 1867, p. 164, pl. xv. fig. 6; Whitmee, P. Z. S. 1874, p. 183; Salvadori, Cat. Birds B. M. xxi. p. 626 (1893); Sharpe, Hand-l. i. p. 92 (1899).

The egg of the Tooth-billed Pigeon in the Collection is but slightly glossy, and measures 1.78 by 1.2\*.

1. Laid on board ship.

A. D. Bartlett, Esq.

<sup>\*</sup> The egg of this species, as figured by Messrs. Finsch and Hartlaub ( $\ell$ ,  $c_*$ ), is of **a** dark brown colour. The specimen in the Collection is white.

#### Order OPISTHOCOMIFORMES.

The eggs of *Opisthocomus hoazin*, the sole representative of the Order, closely resemble the eggs of some of the Rails, especially those of the *Hypotænidia* group, and, like them, are double-spotted.

## Family OPISTHOCOMIDÆ.

Genus OPISTHOCOMUS, Illiger.

Opisthocomus hoazin (P. L. S. Müll.).

Opisthocomus cristatus, Newton, P. Z. S. 1867, p. 164, pl. xv. fig. 7; Cabanis, J. f. O. 1870, p. 318, taf. i. fig. 3; Quelch, Ibis, 1890, p. 327.

Opisthocomus hoazin, Grant, Cat. Birds B. M. xxii. p. 524 (1893); Sharpe, Hand-l. i. p. 93 (1899).

The eggs of the Hoatzin are fairly smooth, have little or no gloss, and vary in shape from the elliptical to the broad oval. They are of a pinkish cream-colour, marked with dots, smears, and blotches of pale lavender and reddish brown. The markings are generally more thickly clustered at one end of the egg than elsewhere. Specimens measure from 1.62 to 1.84 in length, and from 1.25 to 1.31 in breadth.

Demerara.
 British Guiana (J. J. Quelch).

J. J. Quelch, Esq. [P.]. P. L. Sclater, Esq. [P.].

## Order RALLIFORMES.

The eggs of the Rails and Coots are for the most part double-spotted, but many exceptions occur, some being plain white, and others so densely marked with surface streaks and spots that no traces of the underlying markings are visible.

The texture of the shell is generally smooth, but many examples exhibit a certain roughness. The amount of gloss is variable.

Normally, the eggs of the Rails are of a regular oval form, but those of some species are elliptical, biconical, or even spheroidal.

## Family RALLIDÆ.

## Sub-Family RALLINÆ.

## Genus RALLUS, Linn.

## Rallus elegans, Audub.

Railus elegans, Audub.

Rallus elegans, Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 353 (1884); Sharpe, Cat. Birds B. M. xxiii, p. 8 (1894); id. Hand-l. i. p. 93 (1899).

The eggs of the King-Rail, or Great Red-breasted Rail, are mostly of a regular oval form, with very little gloss. They vary from cream-colour to pale pinkish buff and they are spotted and blotched with reddish brown and pale purple. The markings are small and sparingly distributed over the shell. At the broader end, however, they are frequently of larger size and confluent. Numerous examples measure from 1.55 to 1.8 in length, and from 1.15 to 1.25 in breadth.

A. D. Bartlett, Esa

1.	N. America (Henshaw Coll.).	Salvin-Godman Coll.
3.	N. America (Henshaw Coll.).	Salvin-Godman Coll.
4.	N. America, June (G. Hitz: Hen-	Salvin-Godman Coll.
	shaw Coll.).	
3.	N. America (Smiths. Inst.).	Salvin-Godman Coll.
1.	Chicago (Henshaw Coll.).	Salvin-Godman Coll.
4.	Illinois (R. Kennicott: Henshaw Coll.).	Salvin-Godman Coll.
4.	New Jersey (Smiths. Inst.).	Salvin-Godman Coll.

1. N. America.

## Rallus crepitans, Gm.

Rallus longirostris (nec Bodd.), Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 358 (1884).

Rallus crepitans, Sharpe, Cat. Birds B. M. xxiii. p. 12 (1894): id. Hand-l. i. p. 94 (1899).

The eggs of the Clapper Rail resemble those of *R. elegans* in colour, but they vary more in shape and size. They measure from 1·4 to 1·95 in length, and from 1 to 1·22 in breadth.

2.	Cobb's Island, Virginia, May.	W. E. D. Scot	t. Esq. [C.l.]	Princeton
7.	Cobb's Island, 25th June.	**		<u>§</u> .
2.	Cobb's Island, 5th July.	**	,,	) g
2.	Barnegat Bay, New Jersey,		• •	1 2
	12th June.	"	"	
7.	Barnegat Bay, 13th July.			University,
5.	Little Egg Harbour, New Jersey,	**	,,	\ <del>\e</del>
	26th June.	,,	,,	Ξ.
2.	Little Egg Harbour, 26th June.			-2
9.	Little Egg Harbour, 26th June.	"	,,	-
6.	Little Egg Harbour, 26th June.	"	"	Z
7	Little Egg Harbour, 26th June.	,,	**	
• •	There 1.66 That both, 20th Julie.	,,	,,	- 33

110 RALLIDÆ.

# Rallus virginianus, Linn. (Plate IX. fig. 1.)

Rallus virginianus, Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 363 (1884); Sharpe, Cat. Birds B. M. xxiii. p. 16 (1894); id. Hand-l. i. p. 94 (1899).

The eggs of the Virginia, or Little Red-breasted, Rail are of an oval shape with a teudency to the pyriform. They have a considerable amount of gloss. The ground is cream-coloured and this is delicately marked with small well-defined spots of rufous and pale purple, which are more frequent at the large end than elsewhere. The eggs measure from 1.2 to 1.35 in length, and from 1.92 to 1.95 in breadth.

1. N. America.
2. N. America (Henshaw Coll.).
3. N. America (Smiths. Inst.).
3. Wisconsin (T. M. Brewer).
3. D. Bartlett, Esq.
Salvin-Godman Coll.
Salvin-Godman Coll.
Salvin-Godman Coll.

#### Rallus antarcticus, King.

(Plate IX. fig. 4.)

Rallus antarcticus, Scl. & Huds. Argent. Orn. ii. p. 148 (1889); James, New List of Chilian Birds, p. 10 (1892); Sharpe, Cat. Birds B. M. xxiii. p. 19 (1894); id. Hund-l. i. p. 94 (1899).

The eggs of the Antarctic Rail are of a broad oval form and they have little gloss. The ground is of a delicate pinkish-cream colour and this is sparingly spotted, except at the large end where the markings are more numerous, with rufous and pale purple. A few specimens are also marked at the large end with some twisted rufous lines. They measure from 1.62 to 1.75 in length, and from 1.2 to 1.25 in breadth.

8. Central Chile, Oct.

Berkeley James Coll.

## Rallus aquaticus, Linn.

Rallns aquatieus, Thien. Fortpflanz. yes. Vög. tab. Ixxii. fig. 2, a-e (1845-54); Baedeker, Eier Eur. Vög. tab. 44. fig. 1 (1855-63); Hewitson, Egys of Brit. Birds, ii. p. 373, pl. ev. fig. i (1856); Salvin, Ibis, 1859, p. 360; Saunders, Ibis, 1871, p. 225; Dresser, Birds Eur. vii. p. 257 (1878); Seebohm, Brit. Birds, ii. p. 552, pl. 23 (1884); Sharpe, Cat. Birds B. M. xxiii. p. 20 (1894); Irby, Orn. Str. Gibr. 2nd ed. p. 246 (1895); Seebohm, Eggs of Brit. Birds, p. 86, pl. 22. fig. 3 (1896); Sharpe, Hand-l. i. p. 94 (1890).

The eggs of the Water-Rail are normally of a regular oval form, but some are almost perfect ellipses. The amount of gloss is very variable, some possessing it in a high degree and others wanting it. The ground varies from a pinkish eream to a pale pinkish-buff colour, and this is marked with pale purple and reddish brown of different shades. The markings, as a rule, consist of small, well-defined specks and spots intermingled with a few small blotches, and they are more frequent at the large end, where they are often confluent. Specimens measure from 1.25 to 1.5 in length, and from .95 to 1.1 in breadth.

7. Iceland, 23rd June.

2. Rathlin Island (R. Greenwood).

7. Lismore, Ireland.

Garryduff, Waterford, 20th April 7. (R. J. Ussher),

Scotland.

Valkenswaard, Holland, 28th May 4. (H. Seebohm).

Valkenswaard, 29th May (H. S.). 2. Spain, 23rd April (H. Saunders). Malaga, 14th May.

1.

Casas Viejas, Cadiz, May (L. H. Irby). 2.

Zana, Algeria, June (O. Salvin).

Seebohm Coll.

Seebohm Coll.

R. J. Ussher, Esq. [P.].

Seebohm Coll.

Seebolim Coll. Seebohm Coll.

Seebohm Coll

Seebohm Coll. Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll.

#### Genus LIMNOPARDALIS, Cab.

#### Limnopardalis sanguinolentus (Swains.).

Rallus sanguinolentus, Yarr. P. Z. S. 1847, p. 54. Rallus rhytirhynchus, Scl. & Salv. P. Z. S. 1867, p. 990; James, New List of Chilian Birds, p. 10 (1892).

Limnopardalus sanguinolentus, Sharpe, Cat. Birds B. M. xxiii. p. 30 (1894).

Limnopardalis sanguinolentus, Sharpe, Hand-l, i. p. 95 (1899).

The eggs of the Blood-spotted Rail resemble those of Rallus aquaticus. An example from Peru is large, measuring 1:43 by 1:03; Chilian eggs are smaller, measuring from 1.25 to 1.37 in length. and from '93 to '95 in breadth. Yarrell (l.c.) gives the dimensions of an egg of this species as 1.8 by 1.25. Skins of L. sanguinolentus. procured by Mr. Whitely in Peru and Mr. James in Central Chile, are in the collection of the British Museum, and serve to confirm the authenticity of the eggs found by these naturalists in Peru and Chile respectively.

1. Peru (H. Whitely). 4. Central Chile (Landbeck).

Salvin-Godman Coll. Berkeley James Coll.

## Genus HYPOTÆNIDIA, Reichenb.

The eggs of the Rails of this genus are normally of a very broad oval form, sometimes truly elliptical and, not unfrequently, spheroidal. The amount of gloss is very variable, even among the eggs of the same species.

## Hypotænidia striata (Linn.).

Rallus striatus, Swinh. Ibis, 1863, p. 427. Hypotænidia striata, Sharpe, P. Z. S. 1879, p. 352; Hume & Marsh. Game Birds Ind. ii. p. 245 (1879), iii. App. pl. ii. (1880); Legge, Birds Ceyl. p. 775 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 399 (1890); Sharpe, Cat. Birds B. M. xxiii. p. 33 (1894); id. Hand-l. i. p. 95 (1899).

The eggs of the Blue-breasted Banded Rail vary from a pinkish white to a salmon-pink or pinkish buff. The markings, which are pretty evenly distributed over the whole shell, consist of specks, 112 RALLIDÆ.

streaks and blotches varying from pale rufous to bright reddish brown, and underlying pale purple. In some the markings are small; in others they are large and often confluent, especially at the large end. Specimens measure from 1.3 to 1.4 in length, and from .95 to 1.15 in breadth.

1.	Belgaum, 15th Aug. (E. A. Butler).	Hume Coll.
5.	Belgaum, 15th Aug. (E. A. B.).	Hume Coll.
1.	Wynaad, 26th Aug.	Hume Coll.
4.	Sylhet, 22nd June (J. R. Cripps).	Hume Coll.
5.	Pegu, 25th June (E. W. Oates).	Hume Coll.
4.	Pegu, 6th July (E. W. O.).	Hume Coll.
2.	Pegu, 15th July (E. W. O.).	Hume Coll.
2.	Pegu, 17th July (E. W. O.).	Hume Coll.
4.	Pegu, 1st Aug. ( <i>E. W. O.</i> ).	Hume Coll.
3.	Pegu, 3rd Sept. (E. W. O.).	Hume Coll.
5.	Pegu, 10th Sept. (E. W. O.).	Hume Coll.
3.	Pegu, 1st Oct. (E. W. O.).	Hume Coll.
2.	Pegu, 11th Oct. (E. W. O.).	Hume Coll.
2.	Pegu, 1st Sept. (E. W. O.).	Oates Coll.
3.	Pegu, 10th Sept. (E. W. O.).	Seebohm Coll.
12.	Labuan.	Sir Hugh Low [C.].
2.	Formosa $(R, Swinhoe)$ .	Seebohm Coll.

#### Hypotænidia obscurior, Hume.

Hypotænidia obscuriora, Hume & Marsh. Game Birds Ind. ii. p. 253 (1879); Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 400 (1890). Hypotænidia obscurior, Shavpe, Cat. Birds B. M. xxiii. p. 37 (1894); id. Hand-l. i. p. 95 (1899).

The eggs of the Andamanese Banded Rail are of a bright salmonpink, marked with blotches of pale purple and reddish brown. The two sets of markings blend together and are scattered evenly over the whole egg.

The two examples in the Collection measure respectively 1:39 by 1:1 and 1:43 by 1:1; but Mr. Hume, writing of a considerable series, states that the eggs vary from 1:38 to 1:48 in length, and from 1:05 to 1:14 in breadth.

2. Aberdeen, Andamans (R. J. Wimberley).

## Hypotænidia brachypus (Swains.).

Rallus brachipus, Gould, Handb. Birds Austr. ii. p. 336 (1865); Campbell, Nests & Eggs Austr. Birds, p. 61 (1883); North, Nests & Eggs Austr. Birds, p. 329 (1889).

Hypotænidia brachypus, Sharpé, Cat. Birds B. M. xxiii. p. 37 (1894); id. Hand-l. i. p. 96 (1899).

The eggs of Lewin's Water-Rail in the Collection are similar to many of those of *H. striata*. The markings are of small size and evenly distributed over the shell. The measurements of two specimens are respectively: 1·3 by ·98; 1·28 by ·98.

Australia (Wilson).
 Tasmania, 30th Oct.

Gould Coll. Gould Coll.

## Hypotænidia philippinensis (Linn.).

Hypotænidia philippensis, Gould, Handb. Birds Austr. ii. p. 334 (1865); Campbell, Nests & Eggs Austr. Birds, p. 61 (1883); North, Nests & Eggs Austr. Birds, p. 328 (1889).

Rallus pectoralis, Finsch & Hartl. Fauna Centralpolyn. p. 157, tab. iii. fig. 3 (1867); Hutton, Tr. N. Z. Inst. iii. p. 111 (1870); Whitmee, Ibis, 1875, p. 446.

Rallus philippensis, Buller, Birds New Zeal. 2nd ed. ii. p. 95 (1888), Hypotænidia philippinensis, Sharpe, Cat. Birds B. M. xxiii. p. 39 (1894); id. Hand-l. i. p. 96 (1899).

The eggs of the Pectoral Rail vary from pinkish white to rather bright salmon-pink, and the markings, which consist of well-defined spots and blotches and sometimes of streaks, are pale purple and reddish brown. Both sets of markings are most numerous at the large end. Specimens measure from 1.35 to 1.67 in length, and from 1.1 to 1.2 in breadth.

Laid in confinement (Lilford Aviaries). Lord Lilford [P.].

1. Moreton Bay, N.E. Australia. 3. Moreton Bay.

3. Australia.

5. Samoa (S. J. Whitmee). Samoa.

Samoa, Oct.

Salvin-Godman Coll. Gould Coll.

Gould Coll. Seebohm Coll.

Rev. S. J. Whitmee [C.]. Rev. S. J. Whitmee C.

## Genus EULABEORNIS, Gould.

## Eulabeornis castaneiventer, Gould.

Eulabeornis castaneiventris, Gould, Handb. Birds Austr. ii. p. 338 (1865); Campbell, Nests & Eggs Austr. Birds, p. 61 (1883); Meyer, Zeitschr. ges. Orn. i. p. 294, tab. 17. fig. 3 (1884); North, Nests & Eggs Austr. Birds, p. 331 (1889); Sharpe, Cat. Birds B. M. xxiii. p. 49 (1894). Eulabeornis castaneiventer, Sharpe, Hand-I. i. p. 97 (1899).

The single egg of the Chestnut-bellied Wood-Rail in the Collection is almost elliptical in shape and possesses little gloss. The ground is cream-coloured, and this is rather thickly speckled and blotched, in a somewhat streaky manner, with deep reddish brown and pale purple. It measures 2.15 by 1.45.

1. Port Essington, N. Australia.

Gould Coll.

## Genus ARAMIDES, Pucher.

## Aramides albiventris, Lawr.

(Plate IX. fig. 9.)

Aramides albiventris, Scl. & Salv. P. Z. S. 1868, p. 447: Sharpe, Cat. Birds B. M. xxiii, p. 59 (1894); id. Hand-l. i. p. 98 (1899).

The eggs of the White-bellied Wood-Rail are oval or sometimes biconical in form and have but a slight gloss. The ground is of a creamywhite colour, and this is spotted and speckled with reddish brown

and blotched with underlying pale purple. They closely resemble those of the Rails of the genus *Rallus*. Four examples measure respectively: 2.01 by 1.3; 2 by 1.42; 1.99 by 1.43; 2.04 by 1.38.

 British Honduras, May (F. Blanca- Salvin-Godman Coll. neaux).

## Aramides ypacaha (Vieill.).

Aramides ypacaha, Scl. & Huds. Argent. Orn. ii. p. 150 (1889); Sharpe, Cat. Birds B. M. xxiii. p. 60 (1894); Blaauw, Bull. B. O. C. vii. p. xliii (1898); Sharpe, Hand-l. i. p. 98 (1899).

The eggs of the Ypacaha Wood-Rail are of a broad oval form. The ground is of a pinkish cream-colour and the markings resemble those on the eggs of A. albiventris, but are larger and coarser. Three specimens measure respectively: 2.08 by 1.6; 2.1 by 1.55; 2.15 by 1.58.

Laid in confinement (Holland).
 F. E. Blaauw, Esq. [P.].

2. Laid in confinement (Zool. Gardens, Zool. Society. London).

#### Genus OCYDROMUS, Wagler.

## Ocydromus australis (Sparrm.).

Ocydromus australis, Potts, Tr. N. Z. Inst. ii. p. 70 (1869), iii. p. 100 (1870); Buller, Birds New Zeal. 2nd ed. ii. p. 116 (1888); Sharpe, Cat. Birds B. M. xxiii. p. 64 (1894); Blaauw, Bull. B. O. C. vii. p. xliii (1898); Sharpe, Hand-l. i. p. 98 (1899).

The eggs of the New Zealand South-Island Wood-hen vary from a narrow to a broad oval form and have little gloss. They closely resemble the eggs of *Aramides ypacaha* and measure from 2·15 to 2·4 in length, and from 1·47 to 1·65 in breadth.

New Zealand.
 New Zealand.

New Zealand, Feb.
 Canterbury, South Island, New

Zealand.

Laid in confinement (Holland). F. E. Blaauw, Esq. [P.].

Salvin-Godman Coll.

Capt. Stokes [P.].

Capt. R. Snow [P.].

Dr. Lyall [P.].

## Genus DRYOLIMNAS, Sharpe.

## Dryolimnas cuvieri (Pucher.).

Rallus gularis, Cowan, Proc. R. Phys. Soc. Edin. vii. p. 149 (1882);
Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 569,
pl. 306. fig. 2 (1885).

Dryolimnas cuvieri, Sharpe, Cat. Birds B. M. xxiii. p. 70 (1894); id. Hand-l. i. p. 99 (1899).

The eggs of the Madagascar Rail are broad oval, sometimes almost spheroidal, in shape, and of a pale creamy-white colour, with pale purple shell-markings and reddish-brown surface-markings. Both sets are small, well-defined, and sparingly distributed over the shell. Six examples measure from 1.6 to 1.65 in length, and from 1.25 to 1.28 in breadth.

6. Betsileo, Madagascar.

Rev. W. Deans Cowan [C.].

#### Genus CASTANOLIMNAS, Sharpe.

#### Castanolimnas canningi (Blyth).

Rallina canningi, Hume & Marsh. Game Birds Ind. ii. p. 241 (1879); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 398 (1890). Castanolimnas canningi, Sharpe, Cat. Birds B. M. xxiii. p. 80 (1894); id. Hand-l. i. p. 100 (1899).

The eggs of the Andamanese Banded Crake are of a very broad oval or spheroidal form, and are of a pinkish-buff colour, marked with numerous large pale purple, reddish-brown, and maroon-brown dashes and blotches. The two sets of markings are spread over the whole shell, but more thickly at the large end than elsewhere. The four examples in the Collection measure respectively: 1·45 by 1·1; 1·35 by 1·05; 1·42 by 1·12; 1·45 by 1·14.

4. Port Blair, Andamans, 16th July Hume Coll. (F. A. de Roepstorff).

#### Genus CREX, Bechst.

## Crex crex (Linn.).

Rallus crex, Thien. Fortpflanz. ges. Vög. tab. lxxii. fig. 3, a-c (1845-54). Crex pratensis, Baedeker, Eier Eur. Vög. tab. 44. fig. 5 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 372, pl. ev. fig. ii (1856); Dresser, Birds Eur. vii. p. 291 (1878); Seebohm, Brit. Birds, ii. p. 535, pl. 23 (1884); id. Eggs of Brit. Birds, p. 83, pl. 22. fig. 9 (1896). Crex crex, Sharpe, Cat. Birds B. M. xxiii. p. 82 (1894); id. Hand-l. i.

p. 100 (1899).

The eggs of the Corn-Crake are generally of a broad oval form, but elliptical examples are frequent. The ground varies from a creamy white to a pale buff, and it is occasionally of a pale bluishwhite colour. This is marked, rather indistinctly, with small blotches of very pale purple, and with specks, spots, streaks, and blotches of reddish brown. Both sets of markings are somewhat sparingly scattered over the shell except at the larger end, where they are numerous and frequently confluent. On some specimens the markings consist entirely of fine dots. The eggs measure from 1.35 to 1.5 in length, and from 1 to 1.1 in breadth.

- Balmacara, Ross-shire (D. Chisholm: Seebohm Coll. Harqitt Coll.).
- Drumnadrochit, Inverness (A. Law-Seebohm Coll.) ler: Harqitt Coll.).
- 2. Drunnadrochit (A. Lawler: Hargitt Seebohm Coll. Coll.).

10. Northamptonshire, 27th June.

Cambridgeshire (W. Farren). 9.

Churt, Surrey.

4. Sherwood Forest (H. Seebohm). Christiansund, Norway, June. Livonia, Baltic Provs. (Russow).

Pomerania, 20th June (T. Holland). Pomerania, 20th June (T. H.).

Col. L. H. Irby [P.]. Salvin-Godman Coll.

Gould Coll. Seebohm Coll.

Bernhard Hanson [C.].

Seebohm Coll. Seebohm Coll. Seebohm Coll.

#### Genus ZAPORNIA, Leach.

## Zapornia parva (Scop.).

Gallinula minuta, Thien. Fortpflanz, ges. Vög. tab. lxxiii. fig. 3 (1845-

Zapornia minuta, Baedeker, Eier Eur. Vög. tab. 44. fig. 4 (1855-63).

Gallinula pusilla, Kutter, J. f. O. 1865, p. 334.

Porzana parva, Dresser, Birds Eur. vii. p. 283 (1878).

Crex parva, Seebohm, Brit. Birds, ii. p. 547, pl. 23 (1884); id. Eggs of Brit. Birds, p. 85, pl. 22. fig. 6 (1896).

Zapornia parva, Sharpe, Cat. Birds B. M. xxiii. p. 89 (1894); id. Hand-l. i. p. 101 (1899).

The eggs of the Little Crake vary from a regular oval to a biconical shape and are fairly glossy. They are quite abnormal in their coloration. The ground is of a buff or yellowish-brown colour, but this is almost entirely concealed by specks, spots and streaks of rufous brown of various shades. The four specimens in the Collection measure respectively: 1.27 by .9; 1.25 by .9; 1.25 by ·85: 1·3 by ·85.

Crimea, 27th May.

Seebohm Coll.

Sarepta, S. Russia (Dr. Stader: Seebohm Coll. Hargitt Coll.).

## Genus PORZANA, Vieill.

## Porzana porzana (Linn.).

Gallinula porzana, Thien. Fortpflanz, ges. Vög. tab. lxxiii, fig. 1, a-e (1845-54).

Porzana maruetta, Baedeker, Eier Eur. Vög. tab. 44, fig. 2 (1855-63): Dresser, Birds Eur. vii.p. 267 (1878); Hume & Marsh. Game Birds Ind. ii. p. 213 (1879).

Crex porzana, Hewitson, Eggs of Brit. Birds, ii. p. 375, pl. evi. fig. ii (1856); Seebolim, Brit. Birds, ii. p. 540, pl. 23 (1884); id. Eggs of Brit. Birds, p. 84, pl. 22, fig. 1 (1896).

Porzana porzana, Sharpe. Cat. Birds B. M. xxiii. p. 93 (1894); id. Hand-l. i, p. 101 (1899).

The eggs of the Spotted Crake are mostly of a regular oval form, but occasionally they are spheroidal, and they have a considerable amount of gloss. The ground varies from pale buff to reddish buff,

and in some examples it is of a pale greenish white or stone-colour. The markings consist of specks, spots, and very small blotches of pale purple and dark maroon-brown. Numerous specimens measure from 1.15 to 1.4 in length, and from 8 to 1 in breadth.

10. Valkenswaard, Holland (J. Baker). Salvin-Godman Coll.

10. Valkenswaard, 12th May (H. See- Seebohm Coll. bohm).

Valkenswaard, 12th May (H. S.: Seebohm Coll. 4. Harnitt Coll.).

Valkenswaard, 14th May (H. S.: Seebohm Coll. 1. Hargitt Coll.).

5. Valkenswaard, 14th May (H. S.). Seebohm Coll. 9. Seebohm Coll.

Valkenswaard, 19th May (H. S.). Valkenswaard, 19th May (H. S.). Seebohm Coll. 4.

Valkenswaard, 19th May (H. S.). Seebohm Coll. G.

Valkenswaard, 19th May (H. S.). Seebohm Coll. 1. Seebohm Coll. 7.

Valkenswaard, 21st May (H. S.). Valkenswaard, 21st May (H. S.). Seebohm Coll. 8.

3. Valkenswaard, 24th May (H. S.). Seebohm Coll.

Valkenswaard, 25th May (H. S.). 1. Seebohm Coll.

10. Allkerk, Holland, 6th June (J. Salvin-Godman Coll. Baker).

8. South Holland. Lord Lilford [P.].

Brunswick, 9th May (H. Seebohm). Seebohm Coll. Livonia, Baltic Provs. (Russow). Seebohm Coll.

### Porzana carolina (Linn.).

(Plate IX. fig. 2.)

Porzana carolina, Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 370 (1884); Sharpe, Cat. Birds B. M. xxiii. p. 97 (1894); id. Hand-l. i. p. 101 (1899).

The three eggs of the Carolina, or Sora, Crake in the Collection closely resemble those eggs of P. porzana in which the ground is of a pale buff colour. They measure respectively: 1.25 by .9; 1.23 by ·9: 1·3 by ·9.

N. America (Smiths. Inst.). Salvin-Godman Coll. N. America (Henshaw Coll.). Salvin-Godman Coll.

### Porzana pusilla, Pall.

Gallinula pygmæa, Thien. Fortpflanz. ges. Vög. tab. 1xxiii, fig. 2, a-c (1845-54).

Zapornia pygmæa, Bacdeker, Eier Eur. Vög. tab. 44, fig. 3 (1855-63). Crex bailloni, Hewitson, Eggs of Brit. Birds, ii. p. 377, pl. evi. fig. i (1856); Salvin, Ibis, 1859, p. 361; Seebohm, Brit. Birds, ii. p. 543, pl. 23 (1884); id. Eggs of Brit. Birds, p. 84, pl. 22, fig. 4 (1896).

Porzana bailloni, *Dresser, Birds Eur.* vii. p. 275 (1878). Porzana pygmaa, *Cowan, Proc. R. Phys. Soc. Edin.* vii. p. 149 (1882); Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 578, pl. 306, fig. 4 (1885).

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Porzana intermedia, Sharpe, Cat. Birds B. M. xxiii. p. 103 (1894). Porzana pusilla, Sharpe, Hand-l. i. p. 102 (1899).

The eggs of Baillon's Crake resemble so closely the eggs of Zapornia parva as to require no separate description. They are, however, smaller and measure from 1.1 to 1.2 in length and from 8 to 9 in breadth.

RALLIDÆ.

Cambridgeshire, Aug. (W. Farren). Valkenswaard, Holland, June

Salvin-Godman Coll. Salvin-Godman Coll.

(J. Baker). Valkenswaard (Bots).

3. Valkenswaard, May ( H. Seebohm). 3.

Seville, Spain (Lord Lilford). Southern Spain.

1. Zana, Algeria, June (O. Salvin).

Betsileo, Madagascar.

Seebohm Coll. Seebohm Coll. Seebohm Coll. Lord Lilford [P.]. Salvin-Godman Coll.

Rev. W. Deans Cowan [C.].

### Porzana auricularis, Reichen.

Porzana pygmæa, Tacz. J. f. O. 1873, p. 106, tab. iii. fig. 32.

Porzana bailloni, Hume & Marsh. Game Birds Ind. ii. p. 203 (1879), iii. App. pl. ii. (1880); Legge, Birds Ceyl. p. 706 (1880).

Porzana pusilla, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 395 (1890); Sharpe, Cat. Birds B. M. xxiii. p. 106 (1894); Wilson, Journ. Bomb. Nat. Hist. Soc., xii. p. 639 (1899).

Porzana auricularis, Sharpe, Hand-l. i. p. 102 (1899).

Mr. Hume appears to have examined many eggs of Pallas's Crake, the eastern representative of Baillon's Crake, but there is only a single specimen now in his collection. This resembles in colour the eggs of P. pusilla. "The egg of Pallas's Crake is oval, slightly pointed towards one end; the shell of a firm and compact texture, and with a slight gloss. The ground-colour is a sort of a pale olive stone-colour, or very slightly greenish drab, thickly freekled and mottled with faint dusky clouds and streaks, which, in all the eggs that I have seen, were most densely set towards the large end. The dusky markings in some eggs are a sort of pale sepia, but in others have a distinctly purplish tinge. They appear, however, to be at all times dull, inconspicuous and ill-defined. The eggs vary in length from 1.1 to 1.22, and in breadth from .83 to .91. (Hume.)

Himalayas.

Hume Coll.

### Genus SAROTHRURA, Heine.

# Sarothrura insularis (Sharpe).

Corethrura insularis, Cowan, Proc. R. Phys. Soc. Edin. vii. p. 149 (1882); Sharpe, Cat. Birds B. M. xxiii. p. 118 (1894).

Ortygometra insularis, Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 575 (1885).

Sarothrura insularis, Sharpe, Hand-l. i. p. 103 (1899).

The two eggs of Sharpe's Crake in the Collection are of an oval

form, slightly glossy and spotless white. They measure respectively: 1·13 by ·83; 1·1 by ·85.

2. Betsileo, Madagascar.

Rev. W. Deans Cowan [C.].

### Genus CRECISCUS, Cab.

# Creciscus jamaicensis (Gm.).

(Plate IX. fig. S.)

Porzana jamaicensis, Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 377 (1884).

Creciscus jamaicensis, Sharpe, Cat. Birds B. M. xxiii. p. 135 (1894); id. Hand-l. i. p. 104 (1899).

The eggs of the Little Black Crake in the Collection are of an elliptical shape. They have a slight gloss, and are creamy white, rather closely speckled with reddish brown and underlying pale purple. They measure respectively: 1 by ·77; 1 by ·76.

2. Calumet, Illinois, 17th June (De Witt).

Salvin-Godman Coll.

### Creciscus albigularis (Lawr.).

(Plate X. fig. 2.)

Porzana albigularis, Scl. & Salv. P. Z. S. 1879, p. 546. Creciscus albigularis, Sharpe, Cat. Birds B. M. xxiii. p. 140 (1894); id. Hand-l. i. p. 105 (1899).

The eggs of the White-throated Crake in the Collection are oval or sub-elliptical in form and have hardly any gloss. They are creamy white, with a few small pale purple shell-markings and numerous small blotches and spots of reddish brown, more closely set at the larger end of the egg than elsewhere. They measure respectively: 1·3 by ·87; 1·21 by ·89.

2. Remedios, Antioquia, U.S. Colombia Salvin-Godman Coll. (T. K. Salmon).

# Creciscus cayennensis (Bodd.).

(Plate X. fig. 1.)

Porzana cayennensis, Scl. & Salv. P. Z. S. 1879, p. 545. Creciscus cayanensis, Sharpe, Cat. Birds B. M. xxiii. p. 143 (1894). Creciscus cayennensis, Sharpe, Hand-l. i. p. 105 (1899).

The single egg of the Cayenne Crake in the Collection is elliptical in shape, has little or no gloss, and is dull white with a very few minute and inconspicuous specks of pale yellowish brown. It measures 1.37 by .95.

 Remedios, Antioquia, U.S. Colombia Salvin-Godman Coll. (T. K. Salmon). 120 RALLIDÆ.

### Genus LIMNOBÆNUS, Sundev.

### Limnobænus fuscus (Linn.).

Porzana fusca, Swinh. Ibis, 1863, p. 426; Hume & Marsh. Game Birds Ind. ii. p. 217 (1879); Legge, Birds Ceyl. p. 769 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 396 (1890).

Limnobænus fuscus, Sharpe, Cat. Birds B. M. xxiii. p. 146 (1894); id.

Hand-l. i. p. 105 (1899).

The single egg of the Ruddy Crake in the Collection is of an elliptical form, has little gloss, and is of a pinkish-white colour, rather delicately speckled and blotched with reddish brown and underlying pale purple. It measures 1·14 by ·85.

1. Formosa (R. Swinhoe).

Seebohm Coll.

### Genus AMAURORNIS, Reichenb.

### Amaurornis olivacea (Meyen).

Amaurornis olivacea, Steere, List Mamm. & Birds Philipp. p. 26 (1890);
 Sharpe, Cat. Birds B. M. xxiii. p. 153 (1894);
 Grant & Whitehead,
 Ibis, 1898, p. 247;
 Sharpe, Hand-l. i. p. 106 (1899).

The eggs of the Philippine Crake are of a broad oval form, and they have but little gloss. The ground is creamy white, and this is spotted, streaked and blotched, more thickly at the larger end than elsewhere, with reddish brown and underlying pale purple. Two examples measure respectively: 1.65 by 1.22: 1.55 by 1.13.

2. Siquijor, Philippine Islands.

Steere Exped.

# Amaurornis akool (Sykes).

Porzana akool, Hume § Marsh. Game Birds Ind. ii. p. 225 (1879), iii. App. pl. iii. (1880); Oates ed. Hume, Nests § Eyys Ind. B. iii. p. 396 (1890); Barnes, Journ. Bomb. Nat. Hist. Soc. vi. p. 139, pl. —. fig. 908 (1891).

Amaurornis akool, Sharpe, Cat. Birds B. M. xxiii. p. 155 (1894); id. Hand-l. i. p. 106 (1899).

The eggs of the Brown Crake are normally of a broad oval form, and they have but little gloss. The ground is creamy white, and this is covered with streaky markings of a reddish-brown colour, which are more frequent at the larger end and often form a confluent cap. Sometimes the markings attain the dimensions of large blotches, but as a rule they consist of streaks of small size. The underlying markings are of the usual pale purple type. Specimens measure from 1.4 to 1.57 in length, and from 1 to 1.15 in breadth.

- 3. Mongphoo, Sikhim, 3rd June Hume Coll. (J. Gammie).
- 1. Sikhim Terai, 22nd July (J. G.). Hume Coll.

Sikhim Terai, 27th July (J. G.).

1. Gwalior, 9th June. Jhansi (F. R. Blewitt). 1.

Jhansi, 7th Aug. (F. R. B.). 3. Saugor, 24th June (F. R. B.). 4. Raipur (F. R. B.).

14. Belgaum (E. A. Butler). Hume Coll.

C. Maries, Esq. [P.]. Hume Coll.

Hume Coll. Hume Coll. Hume Coll.

Hume Coll.

# Amaurornis phœnicura (Forster). (Plate IX. fig. 5.)

Gallinula phœnicura, Thien. Fortpflanz. ges. Vög. tab. lxxiii. fig. 5 (1845–54); Layard, Ann. & Mag. N. H. (2) xiv. p. 268 (1854).

Porzana phœnicura, Swinh. Ibis, 1860, p. 67. Erythra phœnicura, Sharpe, P. Z. S. 1879, p. 352; Legge, Birds Ceyl. p. 786 (1880); Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 391 (1890); Barnes, Journ. Bomb. Nat. Hist. Soc. vi. p. 138, pl. —. fig. 907 (1891).

Amaurornis phœnicura, Sharpe, Cat. Birds B. M. xxiii. p. 156 (1894); id. Hand-l. i. p. 106 (1899).

The eggs of the White-breasted Crake bear a general resemblance to the eggs of A. akool, but they are much more richly The ground varies from a pinkish cream-colour to a coloured. warm piukish buff. The markings, like those on the eggs of A. akool, present a streaky appearance, but they are much broader and coarser, and cover more of the ground. Numerous examples measure from 1.4 to 1.7 in length, and from 1.1 to 1.22 in breadth.

Eastern Narra, Sind (S. Doig). E. Narra, 20th June (S. D.). 13.

Tanuali, 7th & 8th Aug. 5. Allahabad.

Ι. Sitapur, 8th Aug. (C. R. Cock). 1. Saugor, 11th Aug.

3. Raipur, 20th Aug.

Raipnr, 18th & 21st Aug. Belgaum, 15th Aug (E. A. 6. Butler).

Nulliar, Nilghiris, 24th July. 4. Nulliar, 2nd Aug.

4. 2. Ceylon.

3. Cevlon (E. L. Layard).

Pegu, 10th June (E. W. Oates). Pegu, 24th June (E. W. O.). 2. 3.

Pegu, 15th July (E. W. O.). 2. Myitkyo, Pegu, 6th Aug. 3.

(E. W. O.). Thayetmyo, 18th Aug. (E. W. O.). 1.

Kaukaryit, Tenasserim, 29th Aug. (C. T. Bingham). 5.

Salween River, 26th July (C. T. B.). 9.

Labuan.

5.

Baram, Sarawak, 6th Feb.

I. Baram, 24th Sept. 5. Amoy (R. Swinhoe), Hume Coll. Hume Coll.

Hume Coll. Hume Coll.

Hume Coll. Hume Coll.

Hume Coll. Hume Coll. Hume Coll.

Hume Coll. Hume Coll.

E. L. Layard, Esq. [P.]. Salvin-Godman Coll.

Seebohm Coll. Oates Coll.

Oates Coll. Oates Coll.

Hume Coll.

Hume Coll.

Hume Coll. Sir Hugh Low [C.].

C. Hose, Esq. [P.].

C. Hose, Esq. [P.]. Seebohm Coll.

### Genus TRIBONYX, Du Bus.

### Tribonyx mortieri, Du Bus.

Tribonyx mortieri, Gould, Handb. Birds Austr. ii. p. 324 (1865); Campbell, Nests & Eggs Austr. Birds, p. 60 (1883); North, Nests & Eggs Austr. Birds, p. 324, pl. xix. fig. 4 (1889); Sharpe, Cat. Birds B. M. xxiii. p. 164 (1894); id. Hand-l. i. p. 106 (1899).

The sole egg of Mortier's Tribonyx in the Collection is a regular oval, with little gloss, and of a buff colour sparingly marked with round specks and spots evenly distributed over the whole shell. The underlying markings are of a pale purple, and the surface-markings of a chestnut-brown, colour. On close examination, the egg is found to be also dusted with very minute dots of purple and reddish brown. It measures 2.25 by 1.5.

1. Tasmania.

Gould Coll.

### Genus MICROTRIBONYX, Sharpe.

### Microtribonyx ventralis (Gould).

Tribonyx ventralis, Gould, Handb. Birds Austr. ii. p. 325 (1865);
Campbell, Nests & Eggs Austr. Birds, p. 60 (1883); North, Nests & Eggs Austr. Birds, p. 324, pl. xvii. fig. 4 (1889).
Mierotribonyx ventralis, Sharpe, Cat. Birds B. M. xxiii. p. 165 (1894);
id. Hand-l. i. p. 107 (1899).

Of the two eggs of the Black-tailed Tribonyx in the Collection, one is a regular oval, the other a narrow ellipse. Both are fairly glossy and of a bluish-green colour, sparingly marked with round and oval spots and blotches. The shell-markings are very pale purple; the surface-markings are dull rufous brown. In one specimen there are, in addition, chiefly at the larger end, several fine lines of the latter colour and the whole shell is, moreover, very finely stippled with pale rufous. They measure respectively: 1.9 by 1.2; 1.85 by 1.2.

S. Australia.

Gould Coll.

## Genus PAREUDIASTES, Hartl. & Finsch.

# Pareudiastes pacificus, H. $\mathcal{G}$ F.

(Plate IX. fig. 6.)

Pareudiastes pacificus, Whitmee, P. Z. S. 1874, p. 184; id. Ibis, 1875, p. 446; Sclater, P. Z. S. 1874, p. 605; Sharpe, Cat. Birds B. M. xxiii. p. 166 (1894); id. Hand-l. i. p. 107 (1899).

The sole egg of the Samoan Gallinule in the Collection is of a narrow oval form. The ground is creamy-white and this is marked with numerous spots of reddish brown and purplish brown, together with some pale purple underlying blotches. The markings of both kinds are more numerous at the larger end than elsewhere. It measures 1.8 by 1.25.

1. Samoa, Oct. (S. J. Whitmee).

P. L. Selater, Esq. [P.].

### Genus PORPHYRIORNIS, Allen.

# Porphyriornis nesiotis (Scl.).

(Plate IX. fig. 7.)

Porphyriornis nesiotis, Sharpe, Cat. Birds B. M. xxiii. p. 166 (1894); id. Hand-l. i. p. 107 (1899).

The egg of the Tristan d'Acunha Gallinule in the Collection is of a narrow oval form, nearly glossless, and of a pinkish cream-colour, marked with a few small roundish spots and some rather large blotches of reddish brown. The blotches about the middle of the egg are larger than those elsewhere. There are also some small pale purple underlying blotches, evenly distributed over the shell. It measures 1.95 by 1.3.

1. Tristan d'Acunha Island.

A. Earle, Esq. [P.].

#### Genus GALLINULA, Briss.

### Gallinula tenebrosa, Gould.

Gallinula tenebrosa, Gould, Handb, Birds Austr. ii. p. 328 (1865); Campbell, Nests & Eggs Austr. Birds, p. 60 (1883); North, Nests & Eggs Austr. Birds, p. 325 (1889); Sharpe, Cat. Birds B. M. xxiii. p. 168 (1894); id. Hand-l. i. p. 107 (1899).

The eggs of the Sombre Gallinule in the Collection are of a very broad oval form, have a considerable amount of gloss, and are of a creamy-white colour, marked with numerous specks, spots, streaks, and small blotches of a bright rusty brown, which are more deuse at the larger end than elsewhere. There are also a few inconspicuous specks and spots of pale purple underlying the others. The two specimens measure respectively: 1.57 by 1.17; 1.6 by 1.2.

2. New South Wales.

Gould Coll.

# Gallinula chloropus (Linn.).

Gallinula chloropus, Thien. Fortpflanz. ges. Vöy. tab. lxxiii. fig. 8, a-f (1845-54); Baedeker, Eier Eur. Vöy. tab. 44. fig. 7 (1855-63); Hevitson, Egys of Brit. Birds, ii. p. 378, pl. cvii. fig. i (1856); Saunders, Ibis, 1871, p. 225; Dresser, Birds Eur. vii. p. 313 (1879); Legye, Birds Ceyl. p. 781 (1880); Seebohm, Brit. Birds, ii. p. 557, pl. 23 (1884); Oates ed. Hume, Nests & Egys Ind. B. iii. p. 389 (1890); Sharpe. Cat. Birds B. M. xxiii. p. 169 (1894); Seebohm, Egys of Brit. Birds. p. 87, pl. 22. fig. 7 (1896); Grant & Whitehead, Ibis, 1898, p. 246; Sharpe, Hand-l. i. p. 107 (1899).

Gallinula chloropus, var. pyrrhorrhoa, Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 594, pl. 306, fig. 5 (1885).

The eggs of the Moor-hen are normally of a broad oval form, and have a small amount of gloss. The ground-colour varies much, being creamy white, pale greenish white, pale buff or pinkish buff. The markings consist of specks, spots, and bold blotches of deep reddish brown, and a few underlying pale purple spots. The combinations in which these markings occur are numerous. In some, the

markings are all small and densely set over the shell; in others, spots are combined with huge blotches which are often confluent. As a rule the larger end of the egg is more thickly marked than the other parts. A few specimens are devoid of all markings except some pale purple blotches. Examples vary from 1.55 to 2.17 in length, and from 1.1 to 1.42 in breadth.

length, and from 1.1 to 1.42 in breadth.					
7.	Ratagan, Ross-shire (W. McRae: Hargitt Coll.).	Seebohm Coll.			
- 1	Lochend, Inverness (E. Hargitt).	Seebohm Coll.			
$\frac{1}{7}$ .		Seebohm Coll.			
7.	Lochend, 2nd June (E. H.).	Seebohm Coll.			
7.	Knockie, Inverness (J. Richmond: Hargitt Coll.).				
9.	Cumberland (Heysham).	Gould Coll.			
4.	Allerton Park, Yorkshire, 24th May (E. Hargitt).	Seebohm Coll.			
9.	Lathkill, Derbyshire, 6th June (O. Salvin).	Salvin-Godman Coll.			
3.	Castle Donington, Derbyshire, 15th June.	P. Dalby, Esq. [P.].			
2.	Denham Bridge, 25th May.	Gould Coll.			
5.	Merton, Norfolk, 13th May (H.	Seebohm Coll.			
ο.	Seebohm).	300001111			
5.	Luton Park, Bedfordshire, 28th May	Seebohm Coll.			
-	(H. Seebohm).	Salvin-Godman Coll.			
2.	Finchley (O. Salvin).				
1.	Devon.	Montagu Coll.			
5.	Valkenswaard, Holland, 23rd May (H. Seebohm).	Seebohm Coll.			
5.	Valkenswaard, 23rd May (H. S.).	Seebohm Coll.			
5.	Livonia, Baltic Provs. (Russow).	Seebohm Coll.			
5.	Pomerania (T. Holland).	Seebohm Coll.			
5.	Riddagshausen, Brunswick, 4th June	Seebohm Coll.			
	$(A. \ Nehrkorn).$				
3.	Spain, 28th April (H. Saunders: Hargitt Coll.).	Seebohm Coll.			
5.	Seville, Spain (H. Saunders).	Seebohm Coll.			
1.	Cape of Good Hope.	H. F. Walter, Esq. [P.].			
1.	Eastern Narra, Sind, 21st May	Hume Coll.			
	(S. Doig).				
3.	Eastern Narra, 1st June.	Hume Coll.			
4.	Eastern Narra.	Hnme Coll.			
3.	Utchulda, Etawah, 7th Sept. (W. E. Brooks).	Hume Coll.			
7.	Etawah, 14th Aug. (A. O. Hume).	Hume Coll.			
2.	Etawah, 16th Aug. (A. O. II.).	Hume Coll.			
2. 2.	Etawah, 18th Aug. (A. O. H.).	Hume Coll.			
4.	Samar, Philippines.	J. Whitehead, Esq. [C.].			

# Gallinula galeata, Bp. (Plate IX. fig. 3.)

Gallinula galeata, Thien. Fortpflanz. ges. Vög. tab. lxxiii. fig. 6 (1845-54);
Gosse, Birds Jamaica, p. 381 (1847); A. § E. Newton, Ibis, 1859,
p. 260; Baird, Brewer § Ridgw. Water Birds N. Am. i. p. 388 (1884); Feilden, Ibis, 1889, p. 499; James, New List of Chilian Birds, p. 10 (1892); Sharpe, Cat. Birds B. M. xxiii. p. 177 (1894);
id. Hand-l. i. p. 107 (1899).

The eggs of the Florida Gallinulo resemble those of *G. chloropus* in texture, shape and colour, but they are, on the whole, rather larger.

N. America (Henshaw Coll.).
 N. America (Henshaw Coll.).

2. Ainsworth, Illinois (Joel Reeves:

Henshaw Coll.).

3. Cook Co., Illinois, June (Kennicott).

Jamaica.

1. Jamaica (A. Newton).

1. Bethlehem, St. Croix, W. Indies, 22nd May (A. & E. Newton).

6. Barbados, 8th August.

4. Prov. Tarapaca, Chile, 30th Jan. (A. A. Lane).

Salvin-Godman Coll.

Salvin-Godman Coll. Salvin-Godman Coll.

Salvin-Godman Coll. Old Collection.

Salvin-Godman Coll. Salvin-Godman Coll.

Col. II. W. Feilden [P.]. Berkeley James Coll.

### Genus PORPHYRIOPS, Pucher.

# Porphyriops melanops (Vieill.).

(Plate X. fig. 4.)

Gallinula crassirostris, Yarr. P. Z. S. 1847, p. 54.

Porphyriops melanops, Scl. & Huds. Argent. Orn. ii. p. 156 (1889);
 James, New List of Chilian Birds, p. 10 (1892); Sharpe, Cat. Birds
 B. M. xxiii. p. 182 (1894); id. Hand-l. i. p. 108 (1899).

The eggs of the Thick-billed Water-hen are of a blunt oval form, glossy, and of a brownish-buff colour, with a few small pale purple blotches sunk into the shell, and numerous spots, speeks, and small blotches of rich chocolate-brown on the surface. These latter are most frequent at the large end of the egg, where in many specimens they are mixed with some twisted and knotted lines. The eggs measure from 1.5 to 1.7 in length, and from 1.1 to 1.2 in breadth.

3. Chile.

Central Chile (Landbeck).

Old Collection. Berkeley James Coll.

# Genus GALLICREX, Blyth.

# Gallicrex cinerea (Lath.).

(Plate X. fig. 6.)

Gallinula cristata, Thien. Fortyflanz. ges. Vöy. tab. lxxiii. fig. 4 (1845–54).

Gallicrex cristata, Swinh. Ibis, 1861, p. 56; 1863, p. 425.

Gallicrex cinerea, Legge, Birds Ceyl, p. 791 (1889); Oates ed. Hume, Nests
§ Eggs Ind. B. iii. p. 387 (1890); Barnes, Journ. Bomb. Nat. Hist.
Soc. vi. p. 137, pl. —. fig. 904 (1891); Sharpe, Cat. Birds B. M.
xxiii. p. 183 (1894); id. Hand-l. i. p. 108 (1899).

The eggs of the Kora, or Water-Cock, are of a blunt oval form and glossy. They vary from eream-colour to yellowish or greenish stone-colour. The underlying markings consist of spots and 126 RALLIDÆ.

blotches of pale purple, generally inconspicuous; the surfacemarkings consist of blotches and streaks of reddish brown; at times profusely set over the whole shell, almost concealing the ground; at others, sparingly scattered over the egg, except at the large end, where they frequently form a cap. The intensity of the reddish brown varies a good deal in different specimens. Numerons examples measure from 1.55 to 1.8 in length, and from 1.1 to 1.3 in breadth.

2.	Purneah, Bengal, 15th Aug.	Hume Coll.
3.	Tipperah, Aug. (V. Irwin).	Hume Coll.
3.	Pegu, 20th June (E. W. Oates).	Hume Coll.
6.	Pegu, 26th June (E. W. O.).	Hume Coll.
2.	Pegu, 17th July (E. W. O.).	Hume Coll.
1.	Pegu, 7th Aug. (E. W. O.).	Hume Coll.
1.	Pegu, 7th Aug. (E. W. O.).	Oates Coll.
1.	Pegu, 7th Aug. (E. W. O.).	Seebohm Coll.
1.	Shanghai, June (R. Swinhoe).	Seebohm Coll.
3.	Canton (R. S.).	Seebohm Coll.
	Formosa (R. S.).	Seebohm Coll.

### Genus PORPHYRIOLA, Blyth.

# Porphyriola alleni (Thoms.).

Porphyrio alleni, Dresser, Birds Eur. vii. p. 307 (1880). Porphyriola alleni, Sharpe, Cat. Birds B. M. xxiii. p. 187 (1894); id. Hand-l. i. p. 108 (1899).

The sole egg of Allen's Gallinule contained in the Collection was extracted from the body of a bird shot by Mr. Percival. It is fractured, but its approximate dimensions are 1.4 by 1.05. The ground is of a pinkish cream-colour, and this is marked, more thickly at the larger end than elsewhere, with specks, spots, and small blotches of reddish brown and underlying pale purple.

Ruo River, British Central Africa. A. B. Percival, Esq. [P.].

### Porphyriola martinica (Linn.).

Gallinula martinicensis, Thien. Fortpflanz. ges. Vög. tab. lxxii. fig. 12 (1845-54).

Ionornis martinica, Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 384 (1884).

Porphyriola martinica, Sharpe, Cat. Birds B. M. xxiii. p. 189 (1894); id. Hand-l. i. p. 108 (1899).

The eggs of the American Purple Gallinule are of a blunt oval form, with a small amount of gloss. They are of a pinkish creamcolour closely speckled with minute dots of chocolate-brown and underlying pale purple. The markings are very distinct and small. Four specimens measure respectively: 1.6 by 1.1; 1.58 by 1.13: 1.6 by 1.07; 1.57 by I.1.

4. Panama (J. McLeannan).

Salvin-Godman Coll.

#### Genus PORPHYRIO, Briss.

### Porphyrio cæruleus (Vandelli).

Porphyrio veterum, Baedeker, Eier Eur. Vög. tab. 44. fig. 6 (1855-63); Dresser, Birds Eur. vii. p. 299 (1876).

Porphyrio hyacinthinus, *Salvin, Ibis*, 1859, p. 361; *Bree, Birds Eur.* iv. p. 77, pl. — (1867); 2nd ed. v. p. 44, pl. — (1876); *Saunders, Ibis*, 1871, p. 225.

Porphyrio cæruleus, Sharpe, Cat. Birds B. M. xxiii. p. 194 (1894); id. Hand-l. i. p. 108 (1899).

The eggs of the European Purple Gallinule vary in form from oval to elliptical, and they have very little gloss. The ground ranges from cream-colour to pinkish buff and this is marked, rather thickly, with specks, spots and, sometimes, with small blotches of reddish brown, chocolate-brown and pale purple. The markings on the majority of the eggs are well-defined and roundish in shape; on a few they are blotchy and blurred at the edges. The markings are somewhat larger and more numerous at the broad end. Twelve specimens measure from 2 to 2:25 in length, and from 1:35 to 1:5 in breadth.

2.	Coto	de	Doña	ana,	Aı	ndalı	ıcia	(E	ī.	Se	ebo	$_{ m hm}$	$C_0$	II.
	Sa	uno	lers).											

 Playa de la Resina, Seville, 23rd April Seebohm Coll. (H. S.).

 2. North Africa.
 Gould Coll.

 1. Zana, Algeria (O. Salvin).
 Salvin-Godman Coll.

 1. Zana, 6th June (O. S.).
 Salvin-Godman Coll.

 1. Zana, 9th June (O. S.).
 Salvin-Godman Coll.

 1. Zana, 10th June (O. S.).
 Salvin-Godman Coll.

 1. Zana, 15th June (O. S.).
 Salvin-Godman Coll.

# Porphyrio poliocephalus (Lath.). (Plate X. fig. 3.)

Porphyrio poliocephalus, Legge, Birds Ceyl. p. 795 (1880); Outes ed. Hume, Nests & Eggs Ind. B. iii. p. 384 (1890); Barnes, Journ. Bomb. Nat. Hist. Soc. vi. p. 135, pl. — tig. 902 (1891); Sharpe, Cat. Birds B. M. xxiii. p. 197 (1894); Dresser, Birds Eur. ix. (Suppl.) p. 333 (1896); Sharpe, Hand-l. i. p. 108 (1899).

The eggs of the Indian Blue Gallinule are on the average smaller than those of *P. coruleus*, but do not otherwise differ in any essential particular. They measure from 1.75 to 2.15 in length, and from 1.23 to 1.45 in breadth.

1.	India.	Purchased.
6.	Eastern Narra, Sind (S. Doig).	Hume Coll.
3.	Lovah Bridge, Etawah, 23rd Aug.	Hume Coll.
	(W. E. Brooks).	
2	Lovah Bridge, 25th Aug. (H. E. R.)	Hume Coll

 Utchulda, Etawah, 8th Aug. (W. Hume Coll. E. B.).

2. Utchulda, 18th Aug. (W. E. B.). Hume Coll.

1. Utchulda, 18th Aug. (W. E. B.). Seebohm Coll. Hume Coll. Rahun, Etawah, 16th Aug. (W. E. B.). Etawah, 16th Aug. 11. Hume Coll. Hume Coll. 1. Etawah (A. O. Hume). 1. North India, 25th Aug. (W. E. B.). Seebohm Coll. 1. Jhansi, 18th July. Jhansi, 25th Aug. Oates Coll. Hume Coll. 4. 21. Raipur, C. Provs., Aug. Hume Coll. Pegu, Aug. (E. W. Oates). Oates Coll. 1. Pegu, Aug. (E. W. O.). 1. Seebohm Coll.

### Porphyrio smaragdinus, Temm.

Porphyrio vitiensis, Finsch & Hartl. Fauna Centralpolyn. p. 172, t. iii.
 fig. 2 (1867); E. L. & L. & L. C. Layard, Ibis, 1882, p. 536.
 Porphyrio smaragdinus, Sharpe, Cat. Birds B. M. xxiii. p. 203 (1894);
 id. Hand-l. i. p. 109 (1899).

The eggs of the Pacific Blue Gallinule are of a broad oval form, the shell being extremely rough and without any gloss. The ground-colour varies from pinkish cream to pinkish buff. The markings consist of spots, blotches, and very numerous small speeks of reddish brown and pale purple. The blotches are of considerable size, blurred at the edges and ill-defined, and they frequently form an irregular cap at the larger end. Specimens measure from 1.9 to 2.15 in length, and from 1.32 to 1.4 in breadth.

 Laid in confinement (Sydney, P. L. Sclater, Esq. [P.]. N. S. Wales).

# Porphyrio samoensis, Peale.

Porphyrio indicus, Whitmee, Ibis, 1875, p. 446. Porphyrio samoensis, Sharpe, Cat. Birds B. M. xxiii. p. 204 (1894); id. Hand-l. i. p. 109 (1899).

The single egg of the Samoan Blue Gallinule in the Collection is of an oval form, slightly rough and possesses little gloss. The ground is of a pinkish cream-colour, and this is spotted and blotched with dark reddish brown and pale purple. The markings are more numerous and larger at the broad end of the egg than elsewhere. The specimen measures 1.78 by 1.3.

1. Samoa, September (S. J. Whitmee). P. L. Sclater, Esq. [P.].

### Porphyrio melanonotus, Temm.

Porphyrio melanotus, Gowld, Handb. Birds Austr. ii. p. 321 (1865):
 Potts, Tr. N. Z. Inst. ii. p. 71 (1869), iii. p. 102 (1870): Campbell,
 Nests & Eggs Austr. Birds, p. 59 (1883); North, Nests & Eggs
 Austr. Birds, pp. 323, 415 (1889).

Porphyrio melanonotus. Buller, Birds New Zeal. 2nd ed. ii. p. 79 (1888); Sharpe, Cat. Birds B. M. xxiii. p. 205 (1894); id. Hand-l. i. p. 109

(1899).

The eggs of the Black-backed Blue Gallinule do not differ in any particular respect from those of *P. caruleus* and *P. poliocephalus*,

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excepting that they do not appear ever to exhibit a pinkish ground, all the specimens in the Collection being of a pale cream or creamybuff colour. They measure from 2 to 2.3 in length, and from 1:35 to 1:6 in breadth.

New Zealand. Dr. Sinclair [P.]. 1. Canterbury, South Island, New Capt. R. Snew [P.]. Zealand.

4. New South Wales. Gould Coll. New South Wales. Gould Coll. New South Wales, 27th Sept. Gould Coll.

5. River Murray, S. Australia, 22nd Oct. E. S. Moulden, Esq. [P.].

# Sub-Family FULICINÆ.

### Genus FULICA, Linn.

# Fulica atra, Linn.

Fulica atra, Thien, Fortpflanz, ges. Vög. tab. lxxiv. fig. 1, α-d (1845-54); Baedeker, Eier Eur. Vog. tab. 44. fig. 9 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 380, pl. cvii. fig. ii (1856); Salvin, Ibis, 1859, p. 361; Saunders, Ibis, 1871, p. 225; Scully, Stray Feath. iv. p. 191 (1876); Dresser, Birds Eur. vii. p. 327 (1879); Seebohm, Brit. Birds, ii. p. 564, pl. 23 (1884); Outes ed. Hume, Nests & Eggs Ind. B. iii. p. 386 (1890); Sharpe, Cat. Birds B. M. xxiii. p. 210 (1894);
 Seebohm, Eggs of Brit. Birds, p. 87, pl. 22. fig. 2 (1896); Sharpe, Hand-l. i. p. 109 (1899). Fulica pullata, Thien. tom. cit. tab. lxxiv. fig. 3.

The eggs of the Coot are of a regular oval shape, but sometimes they are elliptical or biconical. They are fairly smooth but have little gloss. The ground varies, being of a cream-colour in some, pale buff or pinkish stone-colour in others. The markings consist of minute specks and small spots of pale purple and blackish brown, usually round and extremely distinct and well-defined. Numerous examples measure from 1.75 to 2.3 in length, and from 1.25 to 1.55 in breadth.

Loch Ashie, Inverness (E. Hargitt). Seebohm Coll.

3. Clumber Park, Notts, 9th May (II. Seebohm Coll. Seebohm).

Clumber Park, 9th May (H. S.). Seebohm Coll.

5. Luton Park, Bedfordshire, 28th May Seebohm Coll. (H. Seebohm).

Avington, Hants, May (E. Hargitt). 7. Seebohm Coll. Riddagshausen, Brunswick, 29th 5. Seebohm Coll.

April (A. Nehrkorn). Seville, Spain, 28th April (H. 1. Seebohm Coll.

Saunders). Seville, 14th April (H. Saunders: Seebohm Coll.

Hargitt Coll.). Seville, 28th April (H. S.: Hargitt Seebohm Coll.

Zana, Algeria, June (O. Salvin). Salvin-Godman Coll. VOL. I.

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Yarkand, 1st June (J. Scully). 1.

Wullur Lake, Kashmir, 9th June. 2.

11. Raipur, C. Provs., Aug.

Hume Coll. Hume Coll. Hame Coll.

### Fulica cristata, Gm.

Fulica cristata, Thien. Fortpflanz, ges. Vog. tab. lxxiv. fig. 4, a-c (1845-54); Tristram, Ibis, 1860, p. 81; Bree, Birds Eur. iv. p. 83, pl. — (1867); 2nd ed. v. p. 50, pl. — (1876); Curney, Ibis, 1868. p. 261; Saunders, Ibis, 1871, p. 225; Dresser, Birds Eur. vii. p. 323 (1879); Sharpe's ed. Layard, Birds S. Africa, p. 621 (1875-84); Sharpe, Cat. Birds B. M. xxiii. p. 215 (1894); id. Hand-l. i. p. 110

Lupha cristata, Baedeker, Eier Eur. Vög. tab. 44. fig. 8 (1855-63).

The eggs of the Crested Coot so closely resemble those of F. atra that they require no separate description. They are, however, rather more richly coloured. They measure from 2.02 to 2.25 in length, and from 1.45 to 1.5 in breadth.

Madre del Rosio, S. Spain (II. Saun- Seebohm Coll. ders).

1. Algeria. Seebohm Coll.

Lake Halloula, Algeria, May (H. B. Seebohm Coll. 9. Tristram).

Potchefstroom, Transvaal, July (T. Seebohm Coll. 4. Aures).

1. S. Africa.

1. S. Africa (E. L. Layard).

Cape of Good Hope (E. L. L.).

E. L. Layard, Esq. [P.]. Salvin-Godman Coll. Salvin-Godman Coll.

# Fulica armillata, Vieill. (Plate X. fig. 8.)

Fulica armillata, Scl. & Huds. Argent. Orn. ii. p. 157 (1889); James, New List of Chilian Birds, p. 10 (1892); Holland, Ibis, 1892, p. 209; Sharpe, Cat. Birds B. M. xxiii. p. 218 (1894); id. Hand-l. i. p. 110 (1899).

The eggs of the Red-gartered Coot are of the same type as those of F. atra, but they are larger, and the ground-colour is much darker. The markings also, instead of being small, round, and well-defined, are in many cases large, of very irregular shape, and blurred at the edges. Specimens measure from 2.1 to 2.45 in length, and from 1.35 to 1.6 in breadth.

Lake Titicaca, 12,500 ft., Peru.

1. Chile (*E. C. Reed*).

2. Santiago, Chile, 1st Dec. Chile.

Argentine Republic, Oct. 3.

R. R. Copeland, Esq. [P.]. Salvin-Godman Coll.

G. Napier, Esq. [P.]. Berkeley James Coll.

A. H. Holland, Esq. [C.].

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### Fulica gigantea, Eyd. & Souleyet.

Fulica gigantea, James, New List of Chilian Birds, p. 10 (1892); Sharpe, Cat. Birds B. M. xxiii. p. 219 (1894); Lane, Ibis, 1897, p. 301; Sharpe, Hand-l. i. p. 110 (1899).

The eggs of the Giant Coot are of a blunt oval or elliptical form, the shell being coarse in texture and without gloss. On account of their large size and the character of the markings, they are easily separable from the eggs of all the other Coots in the Collection. The ground is of a pale cream-colour, and this is sparingly marked with spots and somewhat large blotches of reddish brown and a few shell-markings of pale purple. Five specimens measure from 2.5 to 2.75 in length, and from 1.7 to 1.8 in breadth.

 Province of Tarapaca, Chile (Rahmer Berkeley James Coll. <sup>§</sup> Lane).

# Fulica rufifrons, Philippi & Landb. (Plate X. fig. 7.)

Fulica leucopygia, Durnford, Rhis, 1878, p. 66.
Fulica leucopyga, Sel. & Huds. Argent. Orn. ii. p. 157 (1889); Sharpe, Cat. Birds B. M. xxiii. p. 220 (1894).
Fulica rufilrons, Sharpe. Hand-l. i. p. 110 (1899).

The eggs of the Red-fronted Coot are oval, smooth, and have a small amount of gloss. They are of a pale creamy buff, tinged with green. The underlying markings are few in number, small and of a pale purple colour. The surface-markings are more numerous and consist of specks, small spots and blotches, of rich chocolate-brown. One example has a few twisted lines on the larger end, where, as a rule, there is a tendency for the markings to be more numerous than elsewhere. The three specimens in the Collection measure respectively: 2·15 by 1·45; 2 by ·38; 2·22 by 1·41.

3. Argentine Republic, Oct.

A. H. Holland, Esq. [C.].

#### Fulica american

Fulica americana, Thien. Fortpflanz, ges. Vög. (ab. lxxiv, fig. 2 (1845-54);
Gosse, Birds Jamaica, p. 384 (1847); Salv. & Sel. Dis, 1860, p. 45;
Blakiston, Ibis, 1863, p. 135; Baird, Brewer & Ridgw. Water Birds N. Am. i. p. 393 (1884); Sharpe, Cat. Birds B. M. xxiii,
p. 221 (1894); id. Hand-l. i. p. 110 (1899).

The eggs of the American Coot only differ from those of *F. atra* by their smaller size. They measure from 1.75 to 2.05 in length, and from 1.25 to 1.33 in breadth.

N. America (Henshaw Coll.).

Salvin-Godman Coll.

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 Fort Garland, California, 23rd June Salvin-Godman Coll. (Henshaw Coll.).

 Fort Carlton, Canada, 4th June Salvin-Godman Coll. (T. W. Blakiston).

 Dueñas, Guatemala, 2nd June Salvin-Godman Coll. (O. Salvin).

(O. Salvin).
4. Dneñas, 2nd June (O. S.). Salvin-Godman Coll.

L. Jamaica (A. Newton). Salvin-Godman Coll.

# Fulica leucoptera, Vieill.

(Plate X. fig. 5.)

Fulica leucoptera, Durnford, Hbis, 1878, p. 67; Scl. & Huds. Argent. Orn. ii. p. 158 (1889); Holland, Ibis, 1892, p. 210; Sharpe, Cat. Birds B. M. xxiii. p. 224 (1894); Lane, Ibis, 1897, p. 302; Sharpe, Hand-t. i. p. 110 (1899).

The eggs of the Yellow-billed Coot are oval, fairly smooth, and almost devoid of gloss. They are of a rich creamy-buff colour, speckled all over with pale purple and rich chocolate-brown. The markings are very small and evenly distributed over the shell. The three examples in the Collection measure respectively: 1.85 by 1.3; 1.7 by 1.22; 1.85 by 1.28.

3. Argentine Republic, Sept.

A. H. Holland, Esq. [C.].

### Order PODICIPEDIDIFORMES.

The eggs of the Grebes are of a lengthened elliptical or biconical shape, the two ends being closely alike in contour. Some are of an

oval form, but they are in the minority.

The true shell is generally of a very pale greenish-blue colour, but in fresh eggs it is covered with a thin coat of chalky white matter, which obscures or completely conceals it. At first the eggs have little, if any, gloss. As incubation proceeds, however, the calcarcous covering is worn away, the shell turns to a yellowish-brown, and eventually to a dark earthy-brown, colour, so that in most cases the egg becomes very smooth and highly glossy.

The eggs of the various species of Grebes resemble each other closely, and they cannot be separated in any way except, in some

instances, by their size.

# Family PODICIPEDID.E.

#### Genus PODICIPES, Lath.

### Podicipes fluviatilis (Tunst.).

Podiceps minor, Thien. Fortpflanz. ges. Vög. tab. lxxiv. fig. 10, a, b (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 446, pl. exxi. fig. i (1856); Salvin, Ibis, 1859, p. 364; Seebohm, Brit. Birds, iii, p. 468, pl. 39 (1885); id. Birds Japan. Emp. p. 367 (1890). Tachybaptus minor, Baedeker, Eier Eur. Vöy. tab. 16. fig. 6 (1855-63).

Podiceps fluviatilis, Dresser, Birds Eur. viii. p. 659 (1880).

Podicipes minor, Seebohm, Eggs of Brit. Birds, p. 82, pl. 22, fig. 5 (1896). Podicipes fluviatilis, Irby, Örn. Str. Gibr. 2nd ed. p. 308 (1895); Grant, Cat. Birds B. M. xxvi, p. 507 (1898); Sharpe, Hand-l. i. p. 113 (1899).

The eggs of the Little Grebe measure from 1.35 to 1.65 in length, and from .95 to 1.1 in breadth.

9. Drumnadrochit, Inverness-shire (A. Seebohm Coll. Lawler: Hargitt Coll.).

2. Loch-na-shanish, Inverness (Hargitt Seebohm Coll. Coll.).

4. Knockie, Inverness (J. Richmond: Seebohm Coll. Hargitt Coll.).

5. Tring, Herts, 27th June (H. Seebohm). Seebohm Coll.

3. Avington Park, Hampshire, May (E. Seebohm Coll. Hargitt).

4. Avington Park, May  $(E, H_{\cdot})$ . Seebohm Coll. 5. Denham, Suffolk, 25th May. Gould Coll. Valkenswaard, Holland, 28th May. 3. Seebohm Coll. 4. Mark Brandenburg, 5th July. Seebohm Coll.

õ. Brunswick, 3rd May. Seebohm Coll. 1. Seville, Spain (L. H. Irby). Seebohm Coll.

5. Valencia. Seebohm Coll.

6. Zana, Algeria, June (O. Salvin). Salvin-Godman Coll. Japan (II, Pryer). Seebohm Coll.

# Podicipes philippinensis (Bonn.).

Tachybaptes fluviatilis, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 401 part. (1890).

Podicipes philippensis, Grant, Cat. Birds B. M. xxvi, p. 511 (1898). Podicipes philippinensis, Sharpe, Hand-l. i. p. 113 (1899).

The two eggs of the Philippine Little Grebe in the Collection measure respectively: 1:35 by 1; 1:45 by 1:03.

Pegu, 25th July (E. W. Oates). Seebohm Coll. Poyang Lake, China (F. W. Styan). Seebohm Coll.

# Podicipes capensis, Licht.

(Plate XI. fig. 2.)

Podiceps fluviatilis, Legge, Birds Ceyl. p. 1059 (1880).

Tachybaptes fluviatilis, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 401, part. (1890).

Podicipes capensis, Grant, Cat. Birds B. M. xxvi. p. 513 (1898); Sharpe, Hand-l. i. p. 113 (1899).

Podicipes albipennis, Blanf. Fauna Brit. Ind., Birds, iv. p. 475 (1898).

The eggs of the Indian Little Grebe measure from 1.28 to 1.52 in length, and from .77 to 1.1 in breadth.

4. 1. 3. 5.	India. India. Punjab. Callian, near Bombay, 9th Aug. ( <i>II.</i>	Gould Coll. Salvin-Godman Coll. Professor Oldham [P. Hume Coll.
1.	Wenden). Callian, 29th Aug. (H. W.).	Hume Coll.
6.	Callian, 11th Sept. (H. W.).	Hume Coll.
1.	Etawah, 8th June (W. E. Brooks).	Hume Coll.
-).	Etawah, 9th Sept. (W. E. B.).	Hume Coll.
1.	Etawah, 9th Aug.	Hume Coll.
·5.	Near Allahabad, 26th July (A. O.	Hume Coll.
	Hume).	
1.	Near Allahabad, 7th Aug. (A. O. II.).	Hume Coll.
3.	Jhansi, 18th July.	Hume Coll.
2.	Jhansi, 20th Aug.	Hume Coll.
3.	Raipur.	Hume Coll.
	Central India.	Hume Coll.
2.	Muddapur, Bengal, Aug. (W.E. Brooks).	Hume Coll.
6.	Ahtoor, Madras, 19th Aug. (A. G.	Hume Coll.
	R. Theobald).	
2.		Hume Coll.
3.	Nilghiris, May.	Hume Coll.

# Podicipes novæ-hollandiæ, Steph.

Podiceps gularis, Thien. Fortpflanz. ges. Vög. tab. lxxiv. tig. 11 (1845-54); Gould, Handb. Birds Austr. ii. p. 513 (1865); Campbell, Nests & Frag. Austr. Birds. p. 72 (1883)

S. Eggs Austr. Birds, p. 72 (1883).

Podiceps novæ-hollandiæ, North, Nests & Eggs Austr. Birds, p. 348 (1889).

Podicipes novæ-hollandiæ, Grant, Cat. Birds B. M. xxvi. p. 519 (1898);

Sharpe, Hand-l. i. p. 113 (1899).

The eggs of the Black-throated Grebe measure from 1.3 to 1.45 in length, and from .92 to 1.01 in breadth.

	Australia, 4th March.	Gould Coll.
1.	Australia, 6th October.	Gould Coll.
2		Gould Coll.
:3.	Australia.	Salvin-Godman Coll.

# Podicipes dominicus (Linn.).

Podiceps dominicus, Gosse, Birds Jamaica, p. 440 (1847); Buird, Brewer & Ridgw, Water Birds N. Am. ü. p. 438 (1884).

Tachybaptes dominicus, Scl. & Salv. P. Z. S. 1879, p. 548.

Podicipes dominicus, Grant, Cat. Birds B. M. xxvi. p. 520 (1898); Sharpe, Hand-l. i. p. 113 (1899).

The eggs of the White-winged, or Least, Grebe measure from 1.2 to 1.4 in length, and from .87 to .95 in breadth.

The specimens from Antioquia are much smaller than those from

Jamaica.

Jamaica (A. Newton).

1. Jamaica, 13th Dec. (W. Osburn).

Antioquia, U.S. Colombia (T. K. Salmon).

Salvin-Godman Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

# Podicipes americanus, Garnot.

(Plate XI. fig. 8.)

Podiceps rollandi, Scl. & Huds. Argent. Orn. ii. p. 204 (1889); Holland, Ibis, 1892, p. 214.

Podicipes americanus, Grant, Cat. Birds B. M. xxvi. p. 524 (1898); Sharpe, Hand-l. i. p. 114 (1899).

The eggs of Rolland's Grebe measure from 1.55 to 1.85 in length, and from 1.05 to 1.23 in breadth,

1. Valparaiso, 9th December.

G. Napier, Esq. [P.].A. H. Holland, Esq. [C.].

5. Argentine Republic.

# Genus DYTES, Kaup.

# Dytes auritus (Linn.).

Podiceps auritus, Thien. Fortpflanz. ges. Vög. tab. lxxiv. fig. 7, a-c (1845-54); Baedeker, Eier Eur. Vög. tab. 16, fig. 3 (1855-63); Dresser, Birds Eur. viii, p. 645 (1879).

Podiceps cornutus, Thien. tom. cit. tab. lxxiv. fig. 8, a, b; Baedeker, tom. cit. tab. 16. fig. 4; Hewitson, Eggs of Brit. Birds, ii. p. 445, pl. exxi. fig. iii (1856); Seebohm, Brit. Birds, iii. p. 462, pl. 39 (1885).

Podiceps arcticus, Baedeker, tom. cit. tab. 16. fig. 5.

Podicipes cornutus, Seebohm, Eggs of Brit. Birds, p. 81, pl. 22, fig. 8 (1896).

Podicipes auritus, Grant, Cat. Birds B. M. xxvi. p. 527 (1898). Dytes auritus, Sharpe, Hand-l. i. p. 114 (1899).

The eggs of the Sclavonian Grebe vary from 1.56 to 1.86 in length, and from 1.14 to 1.31 in breadth.

2. Fort Yukon, Alaska (R. Kennicott: Salvin-Godman Coll. Henshaw Coll.).

3. Fort Yukon (R. K.: Henshaw Salvin-Godman Coll. Coll.).

Husevig, Iceland (Benzon). 6.

1. Iceland, 13th June. Iceland (W. Proctor).

4. Myvalin, Iceland, 11th July.

2. Iceland.

Iceland.

2. Iceland, 1st April.

Rago Island, Gulf of Finland, 5. 12th June.

Central Pomerania, 4th June. 5.

Salvin-Godman Cell. Salvin-Godman Coll. Salvin-Godman Coll.

Seebolim Coll. Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebolim Coll.

Seebohm Coll.

### Genus PROCTOPUS, Kaup.

### Proctopus nigricollis (Brehm).

Podiceps auritus, Hewitson, Eggs of Brit. Birds, ii. p. 445, pl. exxi. fig. ii (1856); Tristram, Ibis, 1860, p. 159.

Podiceps nigricollis, Saunders, Ibis, 1871, p. 402; Dresser, Birds Eur. viii. p. 651 (1878); Seebohm, Brit. Birds, iii. p. 465, pl. 39 (1885). Podicipes nigricollis, Seebohm, Eggs of Brit. Birds, p. 81, pl. 22. fig. 11

(1896); Grant, Cat. Birds B. M. xxvi. p. 532 (1898).

Proctopus nigricollis, Sharpe, Hand-l. i. p. 114 (1899).

The eggs of the Black-necked Grebe measure from 1.61 to 1.92 in length, and from 1.1 to 1.28 in breadth.

San Lucar, Spain (H. Saunders). Seebohm Coll.

Seebohm Coll. Sarepta, S.E. Russia (Dr. Stader). 4. Algeria (H. B. Tristram). Seebohm Coll. 3.

Lake Halloula, Algeria, 11th May Seebohm Coll. 3. (H. B. T.).

Lake Halloula, May (H. B. T.). Salvin-Godman Coll. 6

### Proctopus californicus (Heerm.).

Dytes nigricollis californicus, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 434 (1884).

Podicipes californicus, Grant, Cat. Birds B. M. xxvi. p. 535 (1898).

Proctopus californicus, Sharpe, Hand-l. i. p. 114 (1899).

The eggs of the Eared Grebe measure from 1.7 to 1.8 in length, nd from 1.18 to 1.2 in breadth.

1. North America (Smiths. Inst.). Salvin-Godman Coll. Salvin-Godman Coll.

4. Fort Garland, Colorado, June (H. W. H.: Henshaw Coll.).

# Genus LOPHÆTHYIA, Kaup.

# Lophæthyia cristata (Linn.).

Podiceps cristatus, Thien. Fortpflanz. ges. Vög. tab. lxxiv. fig. 5, a, b (1845-54); Baedeker, Eier Eur. Vög. tab. 16. fig. 1 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 441, pl. cxx. fig. ii (1856): Travers, Tr. N. Z. Inst. iii. p. 113 (1870); Sharpe's ed. Layard, Birds S. Africa, p. 785 (1875-84); Dresser, Birds Eur. viii. p. 629 (1879);

Seebohm, Brit. Birds, iii. p. 455, pl. 39 (1885). Podicipes cristatus, Seebohm, Eggs of Brit. Birds, p. 79, pl. 22, fig. 10 (1896); Grant, Cat. Birds B. M. xxvi. p. 544 (1898).

Lophæthyia cristata, Sharpe, Hand-l. i. p. 114 (1899).

The eggs of the Great Crested Grebe vary from 2 to 2.4 in length, and from 1.3 to 1.55 in breadth.

- Rostherne Mere, 21st June (Hargitt Seebohm Coll. Coll.).
- Rostherne Mere, 5th July (Hargitt Seebohm Coll. Coll.).

1. Merton Hall, Norfolk, 14th May Seebohm Coll. (H. Secbohm).

3. Norfolk.

2. Norfolk (A. Cator).

Tring, Herts, 27th June (II. Seebohm). Lake Peipus, Baltic Provinces

(Russow). Garde Sce, Pomerania, 5th June 36.

(H. Seebohm), 4. Neusiedler Lake, Hungary, May,

South Africa.

Salvin-Godman Coll.

Salvin-Godman Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

C. G. Danford, Esq. [P.]. E. L. Layard, Esq. [P.].

### Lophæthyia griseigena (Bodd.).

Podiceps rubricollis, *Thien. Fortpflanz. ges. Vög.* tab. lxxiv. fig. 6, a, b (1845-54); *Bacdeker, Eier Eur. Vög.* tab. 16. fig. 2 (1855-63); *Hewitson, Eggs of Brit. Birds*, ii. p. 443, pl. cxx. fig. i (1856); Secbohm, Brit. Birds, iii. p. 459, pl. 39 (1885).

Podiceps griseigena, Dresser, Birds Eur. viii. p. 639 (1878).

Podicipes rubricollis, Seebohm, Eggs of Brit. Birds, p. 80, pl. 22. fig. 12 (1896).

Podicipes griseigena, Grant, Cat. Birds B. M. xxvi. p. 539 (1898). Lophæthyia griseigena, Sharpe, Hand-l. i, p. 115 (1899).

The eggs of the Red-necked Grebe vary from 1.9 to 2.15 in length, and from 1.25 to 1.5 in breadth.

Kalix, Sweden. 10.

Copenhagen, 20th May (H. Seebohm).

5. Brunswick, 29th April. Brunswick, 20th May. Hirsova, Dobrudscha, 12th June 5. (H. Śeebohm).

4. Sarepta, S.E. Russia (Dr. Stader). 5. Tangiers (Noury: Hargitt Coll.).

Salvin-Godman Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

### Lophæthyia holboelli (Reinh.).

Colymbus holbællii, Baird, Brewer & Ridgw, Water Birds N. Am. ii. p. 428 (1884).

Podicipes holboelli, Grant, Cat. Birds B. M. xxvi. p. 542 (1898). Lophæthvia holboelli, Sharpe, Hand-l. i. p. 115 (1899).

The four eggs of the American Red-necked Grebe in the Collection measure respectively: 2.1 by 1.33; 2.16 by 1.4; 2.2 by 1.4: 2.1 by 1.38.

1. Fort Yukon, Alaska (J. Lockhart: Salvin-Godman Coll. Henshaw Coll.).

3. Fort Yukon (R. Kennicott: Henshaw Salvin-Godman Coll. Coll.).

### Genus ÆCHMOPHORUS, Coues.

# Æchmophorus major (Bodd.).

(Plate XI. fig. 9.)

Echmophorus major, Scl. & Huds. Argent. Orn. ii. p. 202 (1889);

Holland, Ibis, 1892, p. 213; James, New List of Chilian Birds, p. 13 (1892); Grant, Cat. Birds B. M. xxvi. p. 549 (1898); Sharpe, Hand-l. i. p. 115 (1899).

The three eggs of the Great Grebe in the Collection measure respectively: 2·15 by 1·4; 1·8 by 1·2; 1·77 by 1·25.

2. Central Chile.

Paraguay.

Berkeley James Coll. A. K. MacKinnon, Esq. [P.].

### Æchmophorus occidentalis (Lawr.).

Echmophorus occidentalis, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 421 (1884); Grant, Cat. Birds B. M. xxvi. p. 551 (1898); Sharpe, Hand-l. i. p. 115 (1899).

Echmophorus occidentalis clarkii, Baird, Brewer & Ridgw. tom. cit.

p. 423.

The eggs of the Western Grebe vary from 2.22 to 2.38 in length, and from 1.5 to 1.6 in breadth.

North America (Smiths. Inst.).
 Shoal Lake, Canada (D. Gunn:

Salvin-Godman Coll. Salvin-Godman Coll.

Henshaw Coll.).

1. Shoal Lake, Canada (D. Gunn:

Henshaw Coll.).

Salvin-Godman Coll.

### Genus PODILYMBUS, Less.

### Podilymbus podicipes (Linn.).

Podilymbus pediceps, Scl. & Salv. Ibis, 1859, p. 234; Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 440 (1884).

Podilymbus podicipes, Grant, Cat. Birds B. M. xxvi. p. 553 (1898); Sharpe, Hand-l. i. p. 115 (1899).

The eggs of the Thick-billed Grebe measure from 1.62 to 1.75 in length, and from 1.13 to 1.2 in breadth.

2. North America.

3. Winnibago, Ilinois, 5th June (J. W. Tolman; Henshaw Coll.).

4. Dueñas, Guatemala, 2nd June (O. Salvin).

Old Collection. Salvin-Godman Coll.

Salvin-Godman Coll.

### Order COLYMBIFORMES.

# Family COLYMBID.E.

The eggs of the Divers are coarse in texture, but have a fair amount of gloss. They are typically of a narrow oval shape, but long cylindrical or biconical specimens, with both ends quite alike, are not uncommon.

The eggs of all Colymbidee resemble each other very closely, and size is the only character of any assistance in discriminating them.

The ground-colour varies considerably, ranging through dark olive-brown, umber-brown and russet-brown, to dark stone-colour

or dull greenish grey.

The eggs are double-spotted. The underlying or shell-markings are inconspicuous small spots of a purplish grey or pale brown. The surface-markings, consisting of spots and blotches, are inky purple, purplish brown, or even black. These are not usually of any great size, nor are they very thickly spread over the shell. They are, in most cases, distinct and well-defined, and they are often more numerous round the larger end than elsewhere. On a few examples the markings at the larger end have a streaky appearance.

#### Genus COLYMBUS, Linn.

# Colymbus septentrionalis, Linn.

Colymbus septentrionalis, Thien. Fortpflanz. ges. Vöy. tab. vic. fig. 1, a c (1845-54); Bacdeker, Eier Eur. Vöy. tab. 58, fig. 3 (1855-63);
Hewitson, Eggs of Brit. Birds, ii. p. 453, pl. cxxiii. fig. i (1856);
Dresser, Birds Eur. viii. p. 621 (1876); Seebolam & Harvie-Brown, Ibis, 1876, p. 455; Seebolam, Ibis, 1879, p. 161; id. Brit. Birds, iii. p. 412, pl. 35 (1885); id. Eggs of Brit. Birds, p. 78, pl. 21, fig. 2 (1896); Grant, Cat. Birds B. M. xxvi. p. 487 (1898); Sharpe, Hund-t. i. p. 115 (1899).

Urinator lumme, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 457 (1884); MacFarlane, Proc. U.S. Nat. Mus. xiv. p. 416 (1891).

The eggs of the Red-throated Diver measure from 2.6 to 3.1 in length, and from 1.7 to 1.9 in breadth.

- Franklin Bay, Arctic America (R. R. MacFarlane: Henshaw Coll.).
- 2. Cambridge Bay, Arctic America.
- Ritenbenk, Greenland.
   Repulse Bay, Hudson's Bay.
- 2. Repulse Bay, 6th July.
- 2. Greenland.
- 1. Disco Bay, Greenland.
- Greenland (E. Fenéker).

Salvin-Godman Coll.

Capt. Collinson [P.]. Col. II. W. Feilden [P.].

Dr. J. Rae [P.]. Dr. J. Rae [P.].

Dr. J. Rae [ P.]. Governor Holböll.

McCormick Bequest.

Seebohni Coll.

3.

141	() COLYMBIDÆ	•
2.	Greenland (E. F.).	Seebohm Coll.
2.	Greenland, Lat. 62°, 12th June (R.	Seebohm Coll.
	Müller).	
1.	Donegal, Ireland, 25th May.	Seebohm Coll.
2.	Loch Maddy, N. Uist, 5th June (E.	Seebohm Coll.
	V. Scebohm).	a 1 1 a 11
1.	Faröe Islands, 1st June (H.C.Müller:	Seebohm Coll.
	Hargitt Coll.).	0 1 1 6 11
2.	Faröe Islands, 4th June (H. C. M.).	Seebohm Coll.
2.	Faroe Islands, 10th June (H. C. M.).	Seebohm Coll.
2.	Faröe Islands, 10th June (H. C. M.).	Seebohm Coll.
2.	Faröe Islands, 12th June (H. C. M.).	Seebohm Coll.
2.	Faroe Islands, 12th June (H. C. M.).	Seebohm Coll.
સંસંસંસંસ	Faröe Islands, 12th June (H. C. M.).	Seebohm Coll.
$^2$ .	Faröe Islands.	Seebohm Coll.
2.	Bodö, Norway, 26th June (P. God-	Salvin-Godman Coll.
	man).	
2.	Nordland, Norway (R. Collett:	Seebohm Coll.
	Hargitt Coll.).	~
1.		Seebohm Coll.
	(H. Seebohm & J. A. Harvie-	
	Brown).	
2.	Yenesei Valley, Lat. 71½°N.,7th July	Seebohm Coll.
	$(II.\ Secbohm).$	
1.	Yenesei, Lat. $71\frac{1}{5}^{\circ}$ , 9th July ( <i>H. S.</i> ).	Seebohm Coll.

Yenesei, Lat.  $71\frac{1}{2}^{\circ}$ , 9th July (*H. S.*). Yenesei, Lat.  $71\frac{1}{2}^{\circ}$ , 10th July (*H. S.*). Yenesei, Lat.  $71\frac{1}{2}^{\circ}$ , 15th July (*H. S.*). Yenesei, Lat.  $71\frac{1}{2}^{\circ}$ , 20th July (*H. S.*). Yenesei, Lat.  $71\frac{1}{2}^{\circ}$ , 20th July (*H. S.*). Seebohm Coll. Seebohm Coll. Seebohm Coll.

Seebohm Coll.

### Colymbus arcticus, Linn.

Colymbus arcticus, Thien. Fortpflanz. ges. Vög. tab. vic. fig. 2 (1845-54); Baedeker, Eier Eur. Vög. tab. 58. fig. 2 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 451, pl. exxiii. fig. ii (1856); Wheelwright, Spring Mars, R. P. 197, ph. Carling in 1989; where dynamics in Lapl. p. 368 (1871); Dresser, Birds Eur. viii. p. 615 (1876); Seebohm & Harvie-Brown, Ibis, 1876, p. 455; Seebohm, Brit. Birds, iii. p. 407, pl. 35 (1885); id. Eggs of Brit. Birds, p. 78, pl. 21. fig. 1 (1896); Grant, Cat. Birds B. M. xxvi. p. 492 (1898); Sharpe, Hand-l. i. p. 115 (1899).

The eggs of the Black-throated Diver measure from 2.95 to 3.55 in length, and from 1.9 to 2.16 in breadth.

2.	Loch Maddy, N. Uist, 5th June	Seebohm Coll.
	(E. V. Seebohm).	~
1	Sutherland, June $(J, S_{\cdot})$ .	Seebohm Coll.
2.	Loch Vallich, Ross-shire, 17th May	Seebohm Coll.
	$(F.\ McLennan:\ Hargitt\ Coll.).$	
2.	Loch Vallich, 27th May (F. MeL.:	Seebohm Coll.
	Haraitt Coll.).	
2.	Loch Vallich, 12th June (F. McL.:	Seebohm Coll.
	Hargitt Coll.).	
٠٠.	Loch Vallich, 19th June (F. McL.:	Seebohm Coll.
	Hargitt Coll.).	

2, Loch Vallich, 23rd June (F. MeL.: Hargitt Coll.).

1. Inverness-shire.

Loch Knockie, Inverness-shire (J. Richmond : Hargitt Coll.). L. Loch Knockie (J. R. : Hargitt

Coll.).

Loch Knockie (J. R.: Hargitt Coll.). Loch Knockie, 20th May (J. R.:

Hargitt Coll.).

1. Loch Knockie, 6th May (Hargitt Coll.).

2. Loch Knockie, 21st May (Hargitt Coll.). 2.

Loch Knockie, 21st May (E. Hargitt). Loch Knockie, 31st May (E. Hargitt).

2. Loch Carr, Forfar (D. Watson: Hargitt Coll.). Sweden.

1.

Wermland, Sweden (H. W. Wheelwright).

1. Kätkesuando, Lapland (J. Wolley). 5. Lapland (II. W. Wheelwright).

Lapland, 17th July (Nordvi). 2.

R. Petchora, Lat. 68° N., 25th June (H. Seebohm & J. A. Harvie-Brown). Seebolin Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll

Seebohm Coll. Seebohm Coll.

Seebohm Coll. S. O. Sahlin, Esq. [P.].

Salvin-Godman Coll. Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll. Seebohm Coll.

# Colymbus pacificus, Laur.

(Plate XI, fig. 5.)

Urinator pacificus, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 455 (1884); Nelson, Report Nat. Hist. Alaska, p. 37 (1887); Macfarlane, Proc. U.S. Nat. Mus. xiv. p. 416 (1891). Urinator arcticus, Nelson, tom. cit. p. 36.

Colymbus pacificus, Grant, Cat. Birds B. M. xxvi. p. 494 (1898); Sharpe, Hand-l. i. p. 115 (1899).

The eggs of the Pacific Diver vary from 2.9 to 3.3 in length and from 1.75 to 1.87 in breadth.

St. Michael's, Alaska, 6th June (E. W. Nelson: Henshaw Coll.). 2.

Alaska (E. W. N.: Henshaw Coll.). Liverpool Bay, Arctic America (R. 1. R. MacFarlane: Henshaw Coll.).

2. Anderson River, Arctic America, 29th June (R. R. McF.: Smiths. Inst.).

Anderson River Fort (R. R. McF.: 2. Henshaw Coll.).

2. Franklin Bay, Arctic America, 9th July (R. R. McF.: Henshaw Coll.).

Salvin-Godman Coll.

Salvin-Godman Coll. Salvin-Godman Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

### Colymbus glacialis, Linn.

Colymbus glacialis, Thien. Fortpflanz. ges. Vog. tab. vic. fig. 3, a-c (1845-54); Baedeker, Eier Eur. Vög. tab. 58. fig. 1 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 449, pl. exxii. (1856); Dresser, Birds Eur. viii. p. 609 (1880); Seebolm, Brit. Birds, iii. p. 402, pl. 35 (1885); id. Eggs of Brit. Birds, p. 77, pl. 21. fig. 3 (1896); Grant, Cat. Birds B. M. xxvi. p. 496 (1898); Sharpe, Hand-l. i. p. 116 (1899).

Urinator immer, Baird, Brewer & Ridge. Water Birds N. Am. ii. p. 446 (1884).

Urinator imber, MacFarlane, Proc. U.S. Nat. Mus. xiv. p. 416 (1891).

The eggs of the Great Northern Diver measure from 3.4 to 3.8 in length, and from 2.1 to 2.4 in breadth.

Fort Anderson River, 25th June (R. R. MacFarlane: Henshaw Coll.).

1. Illinois.

1. River St. Croix, New Brunswick (II. E. Dresser).

Nova Scotia.

1. Greenland, 10th July (R. Müller).

Greenland, 16th July (R. M.). Greenland, 18th July (R. M.).

4. Iceland (W. Proctor).

Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

N. V. Squairev, Esq. P.

Seebohm Coll. Seebohm Coll. Seebohm Coll.

Seebohm Coll

### Order SPHENISCIFORMES.

The eggs of the Penguins are alike in colour and texture, and differ only with respect to size and shape.

The shell is coarse and rough, and frequently eyered, wholly or in part, with a thin coat of calcareous matter. As incubation proceeds, many examples become quite smooth and also highly glossy.

The eggs of these birds are unspotted white, but, when freshly laid, they possess a distinct tinge of pale blue, and with incubation they often turn yellow.

In shape, they vary greatly. Those of many species are spheroidal. Others are of a broad oval form and, in one species at least, they are decidedly pyriform.

A remarkable fact concerning the Penguins is that birds apparently of the first year lay very small eggs and birds of the second year somewhat larger ones. It is only in the third year, or perhaps even later, that they lay full-sized eggs.

# Family SPHENISCIDÆ.

### Genus APTENODYTES, Forst.

### Aptenodytes patagonica, Forst.

Aptenodytes patachonica, Thien. Fortpflanz. ges. Vog. tab. c. fig. 2 (1845-54).

Aptenodytes longirostris, Sharpe, Phil. Trans. 168, p. 152 (1879); Scl. & Salv. Zool. Challenger' Exped. ii. pt. viii. p. 122 (188)); Sol. t. c. p. 151 (1880); Buller, Birds New Zeal. 2nd ed. ii. p. 306 (1888). Aptenodyta patagonica, Layard, Ibis, 1867, p. 459; Grant, Cat. Birds

B. M. xxvi. p. 627 (1898); Sharpe, Hand-l. i. p. 117 (1899).

The two eggs of the King Penguin in the Collection are pyriform, and measure 4.35 by 3 and 4.25 by 2.95 respectively.

1. Marion Island, Indian Ocean.

Vov. H.M.S. 'Challenger.' Donald Mackinto-h, Esq. Tr. .

New Zealand.

# Genus PYGOSCELIS, Wagler.

### Pygoscelis papua (Forst.).

Aptenodytes papua, Thien. Fortpflanz. ges. Vög. tab. c. fig. 6 (1845) 54).

Eudyptes papna, Gould, P. Z. S. 1859, p. 98; Abbott, Ibis, 1860, p. 336. Pygosceles wagleri, Abbott, Ibis, 1861, p. 163.

Pygoscelis tæniata, Sharpe, Phil. Trans. 168. p. 154 (1879); Saunders, t. c. p. 165 (1879); Buller, Birds New Zeal. 2nd ed. ii. p. 304 (1888).

Pygosceles tæniatus, Scl. & Salv. Zool. 'Challenger' Exped. ii. pt. viii. p. 124 (1880); Scl. t. e. p. 152 (1880).

Pygoscelis papua, Grant, Cat. Birds B. M. xxvi. p. 631 (1898); Sharpe, Hand-l, i. p. 118 (1899).

The eggs of the Rock-Hopper Penguin are almost spherical in shape. The smallest example in the Collection measures 1:45 by Full-sized specimens vary from 2.65 to 2.95 in length and from 2.27 to 2.5 in breadth.

Falkland Islands (C. C. Abbott).

Falkland Islands (C. C. A.).

2. Falkland Islands (C. C. A.).

Falkland Islands (C. C. 4.). Salvin-Godman Coll.

Falkland Islands. 1. East Falklands.

Kerguelen Island (A. E. Eaton).

Voy. H.M.S. 'Challenger.'

Lieut. A. Smith [P.].

Royal Society [P.].

Gould Coll.

Gould Coll.

Gould Coll.

### Genus CATARRHACTES, Briss.

### Catarrhactes chrysocome (Forst.).

Aptenodytes chrysocome, Thien, Fortpflanz, ges. Vög. tab. c. fig. 4

(1845-54); Abbott, Ibis, 1860, p. 337. Eudyptes nigrivestis, Abbott, Ibis, 1861, p. 163. Eudyptes saltator, Sharpe, Phil. Trans. 168. p. 160 (1879); Saunders,

t, c. p. 165 (1879).

Eudyptes chrysocome, Scl. & Salv. Zool. 'Challenger' Exped. ii. pt. viii. (p. 128 (1880); Scl. t. c. p. 152 (1880); Buller, Birds New Zeal. 2nd ed. ii. p. 290 (1888); Hall, Ibis, 1900, p. 32.

Catarrhactes chrysocome, Grant, Cat. Birds B. M. xxvi. p. 635 (1898);

Sharpe, Hand-l. i. p. 118 (1899).

The eggs of the Tufted Penguin vary much in shape. Some are spheroidal, and others are of a short but broad eval form. Two examples, however, are long and narrow, tapering to a point. The smallest egg measures 1.63 by 1.38. Full-sized specimens vary from 2.4 to 2.95 in length, and from 1.7 to 2.2 in breadth.

11. Falkland Islands (C. C. Abbott).

Falkland Islands, 4th Nov. (C. C. A.).

Falkland Islands (C. C. A.).

4. Falkland Islands. 6. Inaccessible Island.

2. Kerguelen Island (A. E. Euton).

Gould Coll. Gould Coll.

Royal Society [P.].

Salvin-Godman Coll. Voy. H.M.S. 'Challenger.' Vov. H.M.S, 'Challenger.'

# Catarrhactes chrysolophus (Brandt).

Eudyptes chrysolophus, Abbott, Ibis, 1860, p. 338; 1861, p. 163; Scl. & Salv, Zool, 'Challenger' Exped. ii. pt. viii. p. 127 (1880); Sel. t. c. p. 152 (1880).

Aptenodytes, sp. inc.\*, Scl. Zool. 'Challenger' Exped. ii. pt. viii. p. 151

Catarrhactes chrysolophus, Grant, Cat. Birds B. M. xxvi. p. 641 (1898): Sharpe, Hand-l. i. p. 118 (1899).

The eggs of the Macaroni Penguin are broad evals with a

tendency, in some cases, to the pyriform.

The specimens procured by the 'Challenger' expedition on Kerguelen Island are all undersized, the smallest measuring 2.4 by 1.8. Full-sized examples measure from 3 to 3.45 in length, and from 2.2 to 2.5 in breadth. They are consequently very much larger than those of C. chrysocome.

Falkland Islands (C. C. Abbott).

Gould Coll. Salvin-Godman Coll.

2. Falkland Islands (C. C. A.).

<sup>\*</sup> There can be little doubt that the eggs found on Heard Island by the 'Challenger' Expedition, and which were undetermined at the time, are the eggs of C. chrysolophus. They agree well with eggs of this species from the Falkland and Crozet Islands.

I. Crozet Island, Indian Ocean (Capt, Armson).

E. L. Layard, Esq. [P.].

Kerguelen Island,
 Heard Island, Indian Ocean.

Voy. H.M.S. 'Challenger.' Voy. H.M.S. 'Challenger.'

### Catarrhactes schlegeli (Finsch).

Eudyptes schlegeli, Buller, Birds New Zeal. 2nd ed. ii. p. 298 (1888).
Catarrhactes schlegeli, Grant, Cat. Birds B. M. xxvi. p. 643 (1898);
Sharpe, Hand-l. i. p. 118 (1899).

The single egg of Schlegel's Penguin in the Collection is almost spherical in form, and mottled with brown and yellow stains. It measures 2.5 by 2.25.

1. New Zealand.

Donald Mackintosh, Esq. [P.].

### Genus EUDYPTULA, $B_P$ .

### Eudyptula minor (Forst.).

Aptenodytes minor, Thien. Fortpflanz. ges. Vöy. tab. c. fig. 5 (1845-54).
 Eudyptula minor, Goudd, Handb. Birds Austr. ü. p. 518 (1865); Buller,
 Birds New Zeal. 2nd ed. ü. p. 300 (1888); North, Nests & Egys Austr.
 Birds, p. 349 (1889); Forbes, Ibis, 1893, p. 543; Grant, Cat. Birds
 B. M. xxvi. p. 646 (1898); Sharpe, Hand-l. i. p. 119 (1899).

Eudyptula undina, Gould, Handb. Birds Austr. ii. p. 521 (1865); Buller, Birds New Zeal. 2nd ed. ii. p. 302 (1888); North, Nests & Eggs

Austr. Birds, p. 350 (1889); Le Souëf, Ibis, 1895, p. 419.

The eggs of the Little Penguin are regular broad ovals. The five specimens in the Collection measure respectively:  $2\cdot26$  by  $1\cdot63$ ;  $2\cdot3$  by  $1\cdot6$ ;  $2\cdot15$  by  $1\cdot65$ ;  $2\cdot15$  by  $1\cdot65$ ;  $2\cdot12$  by  $1\cdot6$ .

1. Bass Straits (Wilson).

Gould Coll.

 Near Badger Island, Bass Straits, 24th Oct.

Gonia Con.

New Zealand.
 New Zealand.

Donald Mackintosh, Esq. [P.]. Capt. R. Snow [P.].

# Genus SPHENISCUS, Briss.

### Spheniscus demersus (Linn.).

Aptenodyta demersa, Thien. Fortpflanz. ges. Vög. tab. c. fig. 3 (1845–54).
Spheniscus demersus, Sharpe's ed. Layard, Birds S. Africa, p. 789 (1875–84); Scl. Ibis, 1891, p. 476; W. L. Scl. Ibis, 1896, p. 519; Grant, Cat. Birds B. M. xxvi. p. 649 (1898); Sharpe, Hand-l, i. p. 119 (1899).

The eggs of the Cape Penguin vary in shape from broad oval to spheroidal. They measure from 2.4 to 2.85 in length, and from 2.03 to 2.12 in breadth. One of the specimens in the Collection is very smooth and highly glossy.

Cape of Good Hope.

4. Cape of Good Hope.

2. South Africa.

1. Laid in confinement (Zool. Gardens, Antwerp).

2. Laid in confinement (Jardin d'Acelimatation, Paris).

Old Collection.

Gould Coll.

E. L. Layard, Esq. [P.]. P. L. Sclater, Esq. [P.].

P. L. Sclater, Esq. [P.].

# Spheniscus humboldti, Meyen.

Spheniscus humboldti, Grant, Cat. Birds B. M. xxvi. p. 650 (1898); Sharpe, Hand-l. i. p. 119 (1899).

The eggs of Humboldt's Penguin in the Collection are of a broad oval form. They measure respectively: 2.9 by 2.15; 2.95 by 2.2.

2. Chile.

Old Collection.

### Spheniscus magellanicus (Forst.).

Aptenodytes demersa, Abbott, Ibis, 1860, p. 336.

Spheniscus magellanicus, Abbott, Ibis, 1861, p. 163; Scl. & Salv. Zool. 
'Challenger' Exped. ii. pt. viii. p. 125 (1880); Scl. t. c. p. 152 (1880); Grant, Cat. Birds B. M. xxvi. p. 651 (1898); Sharpe,

Hand-l. i. p. 119 (1899). Spheniscus demersus, Cunningham, Ibis, 1868, p. 489.

The eggs of the Jackass Penguin vary in form from broad oval to spheroidal. The smallest example in the Collection measures 1.9 by 1.6. The full-sized specimens vary from 2.67 to 3 in length, and from 2 to 2.22 in breadth.

- 2. Falkland Islands (C. C. Abbott).
- 7. Falkland Islands (C. C. A.).
- 1. Falkland Islands.
- 2. Falkland Islands.

Salvin-Godman Coll.

Gould Coll.

Lieut. A. Smith [P.].

Vov. H.M.S. 'Challenger.'

### Order PROCELLARIIFORMES.

The eggs of the Petrels are white, frequently tinged, when fresh and clean, with very pale blue. Those of many species are without markings of any kind; in those of others one end is speckled and spotted with rufous so as to form a eap or zone, and the markings often extend over a considerable portion of the shell. They are usually without gloss, and in no case is there more than a very slight amount of this. The shell is, as a rule, slightly rough and somewhat chalky, but the eggs of some species are fairly smooth. They vary much in shape.

# Family PROCELLARIIDÆ.

### Sub-Family PROCELLARIINÆ.

### Genus PROCELLARIA, Linn.

### Procellaria pelagica, Linn.

Procellaria pelagica, Thien. Fortpflanz. ges. Vög. tab. xcii. fig. 8 (1845-54); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 403 (1884); Seebohm, Brit. Birds, iii. p. 438, pl 56 (1885); id. Eggs of Brit. Birds, p. 74, pl. 20. fig. 4 (1896); Salvin, Cat. Birds B. M. xxv. p. 343 (1896); Sharpe, Hand-l. i. p. 120 (1899).

Thalassidroma pelagica, Baedeker, Eier Eur. Voy. tab. 55. fig. 3 (1855-63); Hewitson, Egys of Brit. Birds, ii. p. 517, pl. cxlv. fig. i (1856);

Dresser, Birds Eur. viii, p. 491 (1874).

The eggs of the Stormy Petrel are usually truly elliptical, but in some specimens one end is slightly pointed. They are without gloss, white, and marked with a zone or cap of minute red dots at one end. Occasionally the dots extend over the whole shell, and sometimes they are entirely absent. They measure from 1 to 1.2 in length, and from .73 to .9 in breadth.

 Faröe Islands (H. C. Müller). Seebohm Coll.
 Faröe Islands, 28th June (H. C. M.: Seebohm Coll. Hargitt Coll.).

 Faröe Islands, 5th Aug. (H. C. M.: Seebohm Coll. Hargitt Coll.).

4. Shetland Islands. Seebohm Coll.
2. Orkney Islands (Dunn). Seebohm Coll.
1. Orkney Islands. Gould Coll.

3. Orkney Islands. Salvin-Godman Coll.
3. The Hebrides (W. Proctor). Seebohm Coll.

2. Tory Islands, Donegal. Seebohm Coll.

5. Ireland. Lord Enniskillen [P.]. 2. Little Skellig, S.W. Ireland, Seebohm Coll.

17th May (W. H. Turle).
4. Blasket Islands, S.W. Ireland, Seebohm Coll.
26th April (W. H. T.).

### Genus HALOCYPTENA, Coues.

# Halocyptena microsoma, Coues. (Plate XI. fig. 1.)

Halocyptena microsoma, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 402 (1884); Salvin, Cat. Birds B. M. xxv. p. 346 (1896); Sharpe, Hand-l, i. p. 121 (1899).

The eggs of the Wedge-tailed Petrel in the Collection are of an elliptical or broad oval shape, white, with a very few minute rufous

dots scattered over the shell, but they are so few and so small that they might easily escape notice. Four examples measure respectively: 1·1 by ·83; 1·05 by ·78; ·97 by ·75; 1·04 by ·73.

3. San Benito Island, Lower California, 12th July.

San Benito Island, 25th July (A. W. Anthony).

A. W. Anthony, Esq. [P.].

Salvin-Godman Coll.

### Genus OCEANODROMA, Reichenb.

### Oceanodroma leucorrhoa (V.).

Procellaria leachii, Thien, Fortpflanz, ges. Vög. tab, xcii. fig. 9 (1845–54): Seebohm, Brit. Birds, iii. p. 443, pl. 56 (1885).

Thalassidroma leachii, Baedeker, Eier Eur. Voy. tab. 55, fig. 2 (1855-63).
 Thalassidroma leucorrhoa, Dresser, Birds Eur. viii. p. 497 (1874); Dixon. Ibis, 1885, p. 95.

Cymochorea leucorrhoa, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 407 (1884).

Oceanodroma lencorrhoa, Seebohm, Eggs of Brit. Birds, p. 75, pl. 20. fig. 7 (1896); Salvin, Cat. Birds B. M. xxv. p. 348 (1896); Sharpe, Hand-l. i. p. 121 (1899).

The eggs of the Fork-tailed, or Leach's, Petrel are either of an elliptical or of a broad oval form, glossless, fairly smooth and white, marked at one end with a zone of minute pinkish dots and specks. They measure from 1:17 to 1:3 in length, and from :9 to :1 in breadth.

1. St. Kilda (Sir W. Milner). 2. Dun, St. Kilda, 10th June

2. Pun, St. Kilda, 10th Ji (C. Diron).

St. Kilda (Tristram Coll.).
 N. America (Henshaw Coll.).

2. Great Menan Island, Bay of Fundy, New Brunswick (H. E. Dresser).

2. Bay of Fundy. 4. Bay of Fundy, June. Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll. Salvin-Godman Coll. Salvin-Godman Coll.

Salvin-Godman Coll. Seebohm Coll.

# Oceanodroma castro (Harcourt). (Plate XI. fig. 4.)

Thalassidroma castro, Harcourt, Sketch of Madeira, pp. 123, 166 (1851):
id. Ann. & Mag. Nat. Hist. (2) xv. p. 436 (1855).

Oceanodroma cryptoleucura, Salvin, Cat. Birds E. M. xxv. p. 350 (1896):

Grant. Ibis, 1896, p. 53; Dresser, Birds Eur. ix. (Suppl.) p. 395
(1896).

Oceanodroma castro, Grant, Ibis, 1898, p. 314; Sharpe, Hand-l. i. p. 121 (1899).

The eggs of Harcourt's Petrel closely resemble those of O. leucorrhoa. The three examples in the Collection measure respectively: 1·3 by ·94: 1·25 by ·96; 1·28 by ·97. 1. Porto Santo Island, Madeira Group, 24th June (Padre Schmitz).

Porto Santo Island, 24th June. 1. Porto Santo Island, 20th Dec.

Hon. C. Baring & W. R Ogilvie Grant, Esq. [P.].

Padre Schmitz [C.]. Padre Schmitz [C.].

## Oceanodroma macrodactyla, Bryant.

Oceanodroma macrodactyla, Salvin, Cat. Birds B. M. xxv. p. 351 (1896); Anthony, Auk, 1898, p. 141; Sharpe, Hand-l. i. p. 121 (1899).

The eggs of the Guadaloupe Petrel in the Collection are much stained, but a zone of pink specks round the thicker end is clearly visible. They are broad ovals in shape, and measure respectively: 1.38 by 1.06; 1.36 by 1.04.

2. Guadaloupe Island, Lower California, A. W. Anthony, Esq. [P.]. 24th March.

### Oceanodroma socorroensis, C. H. Townsend. (Plate XI, fig. 6.)

Oceanodroma socorroensis, Salvin, Cat. Birds B. M. xxv. p. 352 (1896); Anthony, Auk, 1898, p. 141; Sharpe, Hand-l. i. p. 121 (1899).

The eggs of the Socorro Petrel in the Collection are elliptical in shape and white, marked with pink specks and dots at the broader end. In one, these form a cap; in the other, an indistinct zone, a few specks being also scattered over the shell. They measure respectively 1.2 by .87; 1.2 by .9.

2. San Benito Island, Lower California, A. W. Anthony, Esq. [P.]. 12th July.

### Oceanodroma melania $(B_P)$ . (Plate XI, fig. 3.)

Cymochorea melania, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 411 (1884).

Oceanodroma melania, Salvin, Cat. Birds B. M. xxv. p. 353 (1896); Anthony, Auk, 1898, p. 141; Sharpe, Hand-l. i. p. 121 (1899).

The eggs of the Black Petrel are broad ovals, closely approaching the elliptical form. They are smooth, glossless and plain white. without a trace of markings. Four examples measure respectively: 1.35 by 1.05; 1.37 by 1.07; 1.35 by 1.04; 1.35 by 1.03.

- 1. San Benito Island \*, 10th July (A. W. Salvin-Godman Coll. Anthony).
- San Benito Island, 12th July. A. W. Anthony, Esq. [P.].

San Benito Island, 27th July (A. W. Salvin-Godman Coll. Anthony).

<sup>\*</sup> A label accompanying this egg ascribes it to O. socorroensis, but obviously by an oversight.

# Sub-Family OCEANITINÆ.

### Genus OCEANITES, Keys. & Blas.

# Oceanites oceanica (Kuhl).

(Plate XI, fig. 7.)
Decanites oceanicus, Dresser, Birds Eur. viii.

Oceanites oceanicus, Dresser, Birds Eur. viii. p. 505 (1878): Sharpe, Phil. Trans. 168. p. 132 (1879); Legge, Birds Ceyl. p. 1056 (1880); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 416 (1884); Salvin, Cat. Birds B. M. xxv. p. 358 (1896); Hall, Ibis, 1900, p. 19. Procellaria oceanica, Saunders, Phil. Trans. 168. p. 164 (1879). Oceanites wilsoni, Seebohm, Brit. Birds, iii. p. 449 (1885).

Oceanites oceanica, Sharpe, Hand-l. i. p. 122 (1899).

The eggs of Wilson's Petrel are of an elliptical form. They are white, sprinkled with numerous pink speeks and dots which sometimes form a broad zone round one end, or are sometimes distributed over one half of the egg, or evenly scattered over the whole shell. They measure from 1.28 to 1.32 in length, and from .9 to .94 in breadth.

- Kerguelen Island, 23rd Jan. (A. E. Royal Society [P.]. Eaton).
- Kergnelen Island, 2nd Feb. (A.E.E.). Royal Society [P.].
   Kerguelen Island, 7th Feb. (A.E.E.). Royal Society [P.].
- 2. Kerguelen Island, 11th Feb. (A.E.E.). Royal Society P.J.

## Genus GARRODIA, Forbes.

### Garrodia nereis (Gould).

Procellaria nereis, Campbell, Nests & Eggs Austr. Birds, p. 70, fig. 645 (1883).

Garrodia nereis, Buller, Birds New Zeal. 2nd ed. ii. p. 247 (1888): Forbes, Ibis, 1893, p. 542, pl. xiv. fig. 3; Salvin, Cat. Birds B. M. xxv. p. 361 (1896); Sharpe, Hand-I. i. p. 122 (1899).

The single egg of the Grey-backed Petrel in the Collection closely resembles some of the eggs of *Oceanites oceanica*. It is white sprinkled all over with pink dots which also form a cap at one end. It measures 1.3 by .95.

1. Chatham Islands.

H. O. Forbes, Esq. [P.]

# Genus PELAGODROMA, Reichenb.

# Pelagodroma marina (Lath.).

Procellaria marina, Thien. Fortpflanz, yes. Vöy, tab. xcii. fig. 10 (1845-54).
 Pelagodroma marina, Buller, Birds New Zeal. 2nd ed. ii. p. 248 (1888);
 Forbes, Ibis, 1893, p. 542; Grant, Ibis, 1896, p. 51; Salvin, Cat. Birds B. M. xxv. p. 362 (1896); Dresser, Birds Eur. ix. (Suppl.)
 p. 399 (1896); Sharpe, Hand-l. i. p. 122 (1899).

The eggs of the White-faced Petrel are of an elliptical or of a

very broad oval form. They are white, sprinkled with minute dots of pink and purple which often form a cap or zone at one end of the egg. They measure from 1.32 to 1.5 in length, and from 1 to 1.08 in breadth.

1. Australia.

2. Western Australia.

22. Great Salvage Island, 27th April.

Salvin-Godman Coll.

Gould Coll.

Hon. C. Baring & W. R. Ogilvie Grant, Esq. [P.].

### Genus **FREGETTA**, Bp.

The eggs of the Petrols of this genus are of a broad oval form, sometimes almost elliptical, and glossless. They are white, with a eap or zone of pink or purple specks at one end and a few larger markings scattered over the remainder of the shell.

## Fregetta melanogaster (Gould). (Plate XII. fig. 2.)

Thalassidroma melanogaster, Layard, Ibis, 1867, p. 459. Oceanitis tropica, Sharpe, Phil. Trans. 168. p. 130 (1879).

Fregetta melanogastra, Salvin, Zool. 'Challenger' Exped. ii. pt. viii. p. 142 (1880); Scl. t. c. p. 151 (1880).
Fregetta melanogaster, Campbell, Nests & Eggs Austr. Birds, p. 70,

fig. 647 (1883); Buller, Birds New Zeal. 2nd ed. ii. p. 24 (1888); Sharpe, Hund-l. i. p. 122 (1899). Cymodroma melanogaster, Salvin, Cat. Birds B. M. xxv. p. 364 (1896).

One egg of the Black-bellied Petrel in the Collection measures 1.45 by 1.03. A second, which is of a long narrow cylindrical form, measures 1.25 by .73.

 Betsy Cove, Kerguelen Island. 1. Falkland Islands.

Vov. H.M.S. 'Challenger.' Voy. II.M.S. 'Challenger.'

## Fregetta albigularis (Finsch). (Plate XII, fig. 1.)

Fregetta albogularis, Lister, P. Z. S. 1891, pp. 295, 300. Cymodroma albigularis, Salvin, Cat. Birds B. M. xxv. p. 367 (1896). Fregetta albigularis, Sharpe, Hand-l. i. p. 123 (1899).

The eggs of the White-throated Petrel measure from 1.45 to 1.6 in length, and from 1.05 to 1.15 in breadth.

1. Phœnix Island, Phœnix Group, Seebohm Coll. 29th June (J. J. Lister).

Aneiteum, New Hebrides, Jan. Gould Coll. õ. (J. Macgillivray).

# Family PUFFINIDÆ.

# Sub-Family PUFFININÆ.

### Genus PUFFINUS, Briss.

The eggs of the Shearwaters are unspotted white and the shell is smooth. In shape they vary from blunt to pointed ovals, but occasionally they are elliptical. They sometimes exhibit a small amount of gloss, but as a rule they are glossless.

### Puffinus cuneatus, Salvin.

Puffinus cuneatus, Seebohm, Ibis, 1891, p. 191; Salvin, Cat. Birds B. M. xxv. p. 371 (1896); Sharpe, Hand-l. i. p. 123 (1899).

The eggs of Snow's Shearwater measure from 2:37 to 2:65 in length, and from 1:57 to 1:72 in breadth.

 Sulphur I., Bonin Islands, 8th June Seebohm Coll. (P. A. Holst).

 Bailey I., Bonin Islands, 2nd July Seebohm Coll. (P. A. H.).

Bailey I., 2nd July (P. A. H.).
 Bailey I., 9th July (P. A. H.).
 Seebohm Coll.
 Seebohm Coll.

# Puffinus chlororhynchus, Less.

Puffinus sphenurus, Crowfoot, Ibis, 1885, p. 268.

Thiellus sphenurus, Gould, Handb. Birds Austr. ii. p. 466 (1865). Puffinus chlororhynchus, Legge, Birds Ceyl. p. 1054 (1880); Milne-

Puffinus chlororhynchus, Legge, Birds Ceyl. p. 1054 (1880); Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 680, pl. 308. fig. 8 (1885); Buller, Birds New Zeal. 2nd ed. ii. p. 235 (1888); Salvin, Cat. Birds B. M. xxv. p. 372 (1896); Sharpe, Hand-l. i. p. 123 (1899).

The eggs of the Wedge-tailed Shearwater measure from 2.4 to 2.65 in length, and from 1.67 to 1.8 in breadth.

Round Island, Mauritius.
 Round Island (E. L. Layard).
 Australia.
 L. Layard, Esq. [P.].
 Salvin-Godman Coll.
 Gould Coll.

Australia (J. Macgillivray). Gould Coll.
Lord Howe Island (E. Saunders). Seebohm Coll.

2. Norfolk Island, 29th Dec. Dr. W. M. Crowfoot [P.].

### Puffinus kuhli (Boie).

Procellaria puffinus, Thien. Fortpflanz. ges. Vög. tab. xcii. fig. 5 (1845-54).
 Puffinus cinereus, Baedeker, Eier Eur. Vög. tab. 55. fig. 7 (1855-63);
 Wright, Ibis, 1863, p. 439; Eree, Birds Eur. 2nd ed. v. p. 86, pl. — (1876).

Puflinus kuhli, Dresser, Birds Eur. viii. p. 513 (1877); Whitehead, Ibis, 1885, p. 47; Salvin, Cat. Birds B. M. xxv. p. 375 (1896); Grant, Ibis, 1896, p. 47; Sharpe, Hand-l. i. p. 123 (1899).

The eggs of the Mediterranean Shearwater measure from 2.61 to 2.9 in length, and from 1.7 to 1.85 in breadth \*. One specimen possesses a considerable amount of gloss.

 Cerbicali Islands, Corsica, 2nd June Seebohm Coll. (J. Whitehead).

Cerbicali Islands, 2nd June.
 Vacca, Sardinia, 26th May.
 Uacca, Sardinia, 26th May.

 Islet of Filfla, off Malta, June (C. Seebohm Coll. A. Wright).

 Isle near Naxos, Cyclades, 17th June Seebohm Coll. (T. Krüper).

#### Puffinus puffinus (Linn.).

Puffinns anglorum, Baedeker, Eier Eur. Vög. tab. 55. fig. 6 (1855-63);
Hewitson, Eggs of Brit. Birds, ii. p. 514, pl. exliv. fig. i (1856);
Dresser, Birds Eur. viii. p. 517, part. (1876); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 384 (1884); Seebohm, Brit. Birds, iii. p. 420, pl. 56 (1885); Dixon, Ibis, 1885, p. 94; Seebohm, Eggs of Brit. Birds, p. 72, pl. 20. fig. I (1896); Salvin, Cat. Birds B. M. xxv. p. 377 (1896).

Puffinus puffinus, Sharpe, Hand-l. i. p. 123 (1899).

The eggs of the Manx Shearwater measure from 2.25 to 2.5 in length, and from 1.53 to 1.8 in breadth.

- Faröe Islands, 16th May (H.C.Müller: Seebohm Coll. Hargitt Coll.).
- Faröe Íslands, I8th May (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Faröe Íslands, 26th May (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Faröe Íslands, 28th May (H. C. M.: Seebohm Coll. Hargitt Coll.).
- 3. Faröe Islands, 2nd June (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Faröe Islands, 4th June (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Faröe İslands, 6th June (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Faröe Islands, 10th June (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Faröe İslands, İ2th June (H. C. M.: Seebohm Coll. Hargitt Coll.).
- Shetland Islands (J. Hancock).
   Orkney Islands.
   Salvin-Godman Coll.
   Salvin-Godman Coll.
- 1. Orkney Islands. Salvin-Godman Coll
  1. Hoy, Orkney Islands, May
  (J. H. Dunn: Haryitt Coll.).

 $<sup>{}^{*}</sup>$  The eggs of this species figured by Thienemann are much smaller than any of those in the Collection.

5. St. Kilda, Hebrides, 10th June Seebohm Coll. (C. Dixon).

1. Rathlin Island, 22nd May (M. R. Seebohm Coll.

& H. S.).
 Rathlin Island, 23rd May (M. R. Seebohm Coll. & H. S.).

# Puffinus yelcouan (Acerbi). (Plate XII. fig. 3.)

Puffinus anglorum, Dresser, Birds Eur. viii. p. 517, part. (1876). Puffinus yelkouan, Whitehead, Ibis, 1885, p. 48.

Puffinus yelkouanus, Salvin, Ćat. Birds B. M. xxv. p. 379 (1896). Puffinus yelcouan, Sharpe, Hand-l. i. p. 123 (1899).

The single egg of the Levantine Shearwater in the Collection is inseparable from the eggs of *P. puffinus*. It measures 2.3 by 1.6.

1. Cerbicali Islands, Corsica, 2nd May. J. Whitehead, Esq. [C.].

#### Puffinus opisthomelas, Coues.

Puffinus gavia, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 389 (1884)

Puffinus opisthomelas, Salvin, Cat. Birds B. M. xxv. p. 380 (1896); Anthony, Auk, 1896, p. 223; Sharpe, Hand-l. i. p. 123 (1899).

The three eggs of the Black-vented Shearwater in the Collection measure respectively: 2·42 by 1·62; 2·4 by 1·64; 2·22 by 1·61.

3. Natividad Island, Lower California, A. W. Anthony, Esq. [P.]. 10th April.

## Puffinus auduboni, Finsch.

Puffinus obscurus, Cory, Birds Bahama Islands, p. 219 (1880); Seebohn,
Brit. Birds, iii. p. 425, pl. 56 (1885); id. Eggs of Brit. Birds,
p. 72, pl. 20, fig. 2 (1896); Salvin, Cat. Birds B. M. xxv. p. 382,
part. (1896); Dresser, Birds Eur. ix. (Suppl.) p. 403 (1896).

Puffinus auduboni, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 386 (1884); Feilden, Ibis, 1889, pp. 60, 503; Cory, Birds W. Indies, p. 282 (1889); Sharpe, Hand-l. i. p. 124 (1899).

The three eggs of Audubon's Dusky Shearwater in the Collection measure respectively: 2·1 by 1·48; 2·05 by 1·46; 2·07 by 1·35.

I. Bahamas, 4th April (Diventz). Seebohm Coll.

2. Barbados, 22nd March. Col. H. W. Feilden [P.].

## Puffinus subalaris, Ridgw. (Plate XII. fig. 4.)

Puffinus subalaris, Ridgw. Proc. U. S. Nat. Mus. xix. p. 650 (1897); Sharpe, Hand-l. i. p. 124 (1899).

Puffinus obscurus subalaris, Rothsch. & Hartert, Nov. Zool. vi. p. 195 (1899).

Two eggs of the Galapagos Shearwater measure respectively: 2.02 by 1.37; 2.01 by 1.39.

- 1. Culpepper Island, Galapagos, 27th July Webster-Harris Exped. (C. D. Hull).
- 1. Culpepper Island, 27th July (F. P. Webster-Harris Exped. Drowne).

#### Puffinus assimilis, Gould.

Puffinus nugax, Gould, Handb. Birds Austr. ii. p. 458 (1865); North.

Nests & Eggs Austr. Birds, p. 377, pl. xxi. fig. 3 (1889).
Puffinus assimilis, Buller, Birds New Zeal. 2nd ed. ii. p. 239 (1888); Salvin, Cat. Birds B. M. xxv. p. 384 (1896); Grant, Ibis, 1896, p. 50; Dresser, Birds Eur. ix. (Suppl.) p. 407 (1896); Sharpe, Hand-l. i. p. 124 (1899).

The eggs of the Allied Shearwater in the Collection measure respectively: 1.9 by 1.45; 1.9 by 1.34; 2 by 1.43; 2 by 1.4.

St. Ambrose, 21st July.

Dr. Coppinger [P.]. Voy. H.M.S. 'Herald.'

Raoul Island, Kermadec Group, Pacific Ocean, July (J. Macgillivray).

1. Great Salvage Island, 25th April.

Hon. C. Baring & W. R. Ogilvie Grant, Esq. [P.].

## Puffinus carneipes, Gould.

Nectris carneipes, Gould, Handb. Birds Austr. ii. p. 465 (1865); North, Nests & Eggs Austr. Birds, p. 361 (1889).

Puffinus carneipes, Salvin, Cat. Birds B. M. xxv. p. 385 (1896); Sharpe, Hand-l. i. p. 124 (1899).

The eggs of the Fleshy-footed Shearwater in the Collection measure respectively: 2.75 by 1.95; 2.85 by 1.83.

2. Australia (E. P. Ramsay).

Seebohm Coll.

## Puffinus tenuirostris (Temm.).

Procellaria brevicauda, Thien. Fortpflanz. ges. Vög. tab. xcii. fig. 7 (1845-54).

Puffinus obscurus, R. Elwes, Ibis, 1859, p. 397.

Nectris brevicaudns, Gould, Handb. Birds Austr. ii. p. 459 (1865); North, Nests & Eggs Austr. Birds, p. 360 (1889).

Puffinus tenuirostris, Buller, Birds New Zeal. 2nd ed. ii. p. 230 (1888): Salvin, Cat. Birds B. M. xxv. p. 388 (1896); Montgomery, Ibis. 1898, p. 209; Sharpe, Hand-l. i. p. 124 (1899).

The eggs of the Short-tailed Shearwater, or Mutton-bird, measure from 2.5 to 2.9 in length, and from 1.65 to 1.9 in breadth.

Australia.

Old Collection.

Gippsland, Victoria. F.A. Philbrick, Esq., Q.C. [P.]. l. 2. Goose Island, Bass Straits, 3rd March Voy. H.M.S. 'Rattlesnake.'

(J. Maegillivray). Bass Straits.

Gould Coll. Gould Coll.

 $^2$ . Port Davey, Tasmania. 2.

Lord Howe Island, Dec. (J. Mac- Voy. II.M.S. 'Herald.'

qillivray). Lord Howe Island (E. Saunders).

Seebohm Coll.

#### Puffinus nativitatis, Streets.

Puffinus nativitatis, Lister, P. Z. S. 1891, pp. 295, 300; Salvin, Cat. Birds B. M. xxv. v. 389 (1896); Sharpe, Hand-l. i. p. 124 (1899).

The single egg of the Christmas-Island Shearwater in the Collection measures 2.3 by 1.45.

1. Phœnix Island, Phœnix Group, J. J. Lister, Esq. [P.]. Pacific Ocean, 29th June.

#### Genus MAJAQUEUS, Reichenb.

#### Majaqueus æquinoctialis (Linn.).

Procellaria æquinoctialis, Layard, Ibis, 1867, p. 459.

Majaqueus aequinoctialis, Sharpe, Phil. Trans. 168, p. 119 (1879); Saunders, t. c. p. 164 (1879); Salrin, Zool. 'Challenger' Exped. ii. pt. viii. p. 143; Scl. t. c. p. 151 (1880); Salvin, Cat. Birds B. M. xxv. p. 395 (1896); Sharpe, Hand-l. i. p. 125 (1899); Hall, Ibis, 1900, p. 21.

The eggs of the Great Black Petrel are regular broad ovals, fairly smooth and white. With incubation, however, the shell becomes much stained. They measure from 2.83 to 3.4 in length, and from 1.95 to 2.23 in breadth \*.

- Voy. H.M.S. 'Challenger.' Kerguelen Island.
- 2. Kerguelen Island, 19th Nov. (A. E. Royal Society [P.]. Eaton).
- 1. Kerguelen Island, 7th Dec. (A.E.E.). Royal Society [P.].
- Royal Society [P.]. Royal Society [P.] 2. Kerguelen Island, 8th Dec. (A.E.E.).
- Kerguelen Island, 12th Dec. (A.E.E.). Royal Society [P.]. 1. Kerguelen Island, 13th Dec. (A.E.E.).
- Royal Society [P.]. 2. Kerguelen Island, 27th Dec. (A.E.E.).

## Genus **ESTRELATA**, $B_P$ .

The Petrels of this genus lay white eggs. They are either of a regular broad oval or of an elliptical shape. The shell is smooth and without gloss.

## Estrelata lessoni (Garn.).

(Estrelata lessoni, Sharpe, Phil. Trans. 168, p. 126 (1879); Saunders, t. c. p. 164 (1879); Salvin, Zool, 'Challenger' E. ped, ii. pt. viii. p. 144 (1880); Scl. t. c. p. 151 (1880); Salvin, Cat. Birds B. M. xxv. p. 401 (1896); Sharpe, Hand-l. i. p. 125 (1899); Hall, Ibis, 1900, p. 23.

The eggs of Lesson's Petrel measure from 2.75 to 2.95 in length. and from 1.92 to 2.05 in breadth.

<sup>\*</sup> The egg figured by Thienemann under the name of Procellaria equinoctialis (Fortpflanz, tab. xcii. fig. 6) is much too small to be accepted as that of this species.

- 10. Kerguelen Island. Voy. H.M.S. 'Challenger.'
  - Kerguelen Island, 8th Dec. (A. E. 1. Royal Society [P.]. Eaton).
  - Kergnelen Island, 21st Dec. (A.E.E.). Royal Society [P.]. 1.
- Kerguelen Island, 22nd Dec. (A.E.E.). Royal Society [P.] Kerguelen Island, 28th Dec. (A.E.E.). Royal Society [P.]
- 2.

## Œstrelata parvirostris (Peale).

(Estrelata parvirostris, Lister, P. Z. S. 1891, pp. 295, 300; Salvin, Cat. Birds B. M. xxv. p. 405 (1896); Sharpe, Hand-l. i. p. 125 (1899).

The three eggs of the Small-billed Petrel in the Collection measure respectively: 2:25 by 1:62; 2:25 by 1:6; 2:25 by 1:63.

- 2. Phœnix Island, Phœnix Group, Seebohm Coll. 29th June (J. J. Lister).
- 1. Canton Island, Phœnix Group, Seebohm Coll. 6th July (J. J. L.).

#### Œstrelata brevirostris (Less.).

(Estrelata brevirostris, Sharpe, Phil. Trans. 168, p. 124 (1879); Saunders, t. c. p. 164 (1879); Salvin, Cat. Birds B. M. xxv. p. 409 (1896); Sharpe, Hand-l. i. p. 126 (1899).

The two eggs of the Short-billed Petrel in the Collection measure respectively: 2.27 by 1.77: 2.2 by 1.7.

Kerguelen Island, 8th Nov. (A. E. Royal Society [P.]. Eaton).

## Estrelata neglecta (Schl.).

(Estrelata neglecta, Salvin, Cat. Birds B. M. xxv. p. 412 (1896); Sharne, Hand-l. i. p. 126 (1899).

The two eggs of the Soft-plumaged, or Downy, Petrel in the Collection measure respectively: 2.62 by 1.84; 2.5 by 1.75.

Island, Kermadec Group, Gould Coll. Pacific Ocean, July (J. Macgillivray).

## Genus BULWERIA, $B_{I'}$ .

## Bulweria bulweri (J. A. S.).

Thalassidroma bulwerii, Baedeker, Eier Eur. Vog. tab. 55, fig. 1 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 522, pl. cxlv. fig. iii (1856).

Bulweria columbina, Dresser, Birds Eur. viii. p. 551 (1878); Kocniy, J. f. O. 1890, p. 289, tab. viii. fig. 11: Seebolen, Egys of Brit. Birds, p. 73, pl. 20. fig. 3 (1896). Bulweria bulweri, Baird, Brewer & Ridgw. Water Birds N. Am. ii.

p. 398 (1884); Salvin, Cat. Birds B. M. xxv. p. 420 (1896); Grant, Ibis, 1896, p. 54; Sharpe, Hand-l. i. p. 127 (1899).

The eggs of Bulwer's Petrel are broad, blunt ovals, smooth,

white and without gloss. They measure from 1.55 to 1.7 in length, and from 1.18 to 1.25 in breadth.

2. [Madeira.]

5. Madeira (Baker).

2. Desertas, 15th June.

4. Desertas.

1. Porto Santo, 22nd June.

1. Porto Santo, 22nd June (Padre Schmitz).

Old Collection.

Salvin-Godman Coll. Padre Schmitz [C.].

Seebohm Coll.

Padre Schmitz [C.].

Hon. C. Baring & W. R. Ogilvie Grant, Esq. [P.].

## Sub-Family FULMARINÆ.

## Genus OSSIFRAGA, Hombr. & Jacq.

## Ossifraga gigantea (Gm.).

Procellaria gigantea, Thien. Fortpflanz, ges. Vög. tab. xcii. fig. 3 (1845-54); Baedeker, Eier Eur. Vög. tab. 80. fig. 1 (1855-63); Abbott, Ibis, 1861, p. 164; Layard, Ibis, 1867, p. 458.

Ossifraga gigantea, Gould, Handb. Birds Austr. ii. p. 443 (1865); Travers, Tr. N. Z. Inst. v. p. 219 (1872); Sharpe, Phil. Trans. 168. p. 142 (1879); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 363 (1884); Buller, Birds New Zeal. 2nd ed. ii. p. 225 (1888); Salvin, Cat. Birds B. M. xxv. p. 422 (1896); Sharpe, Hand-l. i. p. 127 (1899); Hall, Ibis, 1900, p. 25.

The eggs of the Giant Fulmar are roughly granulated, of an oval form, plain white and without gloss. They measure from 3.85 to 4 in length, and from 2.35 to 2.7 in breadth.

2. [Southern Ocean.]

Old Collection. Salvin-Godman Coli.

1. Falkland Islands (C. C. Abbott).

Gould Coll.

Falkland Islands.

Genus FULMARUS, Steph.

## Fulmarus glacialis (Linn.).

Procellaria glacialis, *Thien. Fortpflanz. ges. Vög.* tab. xcii. fig. 2 (1845–54): *Hewitson, Eggs of Brit. Birds*, ii. p. 512, pl. cxliv. fig. ii (1856).

Fulmarus glacialis, Baedeker, Eier Eur. Vög. tab. 55. fig. 1 (1855-63);
Dresser, Birds Eur. viii. p. 535 (1878); Baird, Brewer & Ridgw.
Water Birds N. Am. ii. p. 366 (1884); Dixon, Ibis, 1885, p. 92;
Seebohn, Brit. Birds, iii. p. 430, pl. 56 (1885); id. Eggs of Brit.
Birds, p. 73, pl. 20. fig. 5 (1896); Salvin, Cat. Birds B. M. xxv.
p. 425 (1896); Sharpe, Hand-l. i. p. 127 (1899).

The Fulmar, H. J. Elwes, Ibis, 1869, p. 32.

The eggs of the Fulmar Petrel are mostly of a broad oval shape; a few are biconical. They are rough and chalky in texture, without gloss and plain white, but they soon become discoloured with in-

cubation. They measure from 2.55 to 3.05 in length, and from 1.75 to 2.1 in breadth.

 Faröe Islands, 28th May (H. C. Seebohm Coll. Müller: Hargitt Coll.).

 Faröe Islands, İst June (H. C. M.: Seebohm Coll. Harqitt Coll.).

 Faröe Islands, 6th June (H. C. M.: Seebohm Coll. Harqitt Coll.).

 Faröe Islands, 17th June (H.C. M.: Seebohm Coll. Harqitt Coll.).

 Faröe Islands, 25th June (H. C. M.: Seebohm Coll. Hargitt Coll.).

4. Faröe Islands (H. C. M.: Hargitt Seebohm Coll. Coll.).

 Faroe Islands, 24th May (H. W. Seebohm Coll. Feilden).

2. St. Kilda, 22nd May (H. J. Elwes). Seebohm Coll.

St. Kilda, June (C. Dixon).
 Iceland (W. Proctor).
 Seebohm Coll.
 Salvin-Godman Coll.

1. [Iceland.] Miss E. Mackenzie [P.].

#### Fulmarus glupischa, Stejn.

Fulmarus glacialis, Seebohm, Ibis, 1879, p. 25; id. Birds Japan. Emp. p. 268 (1890).

Fulmarus glacialis glupischa, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 366 (1884).

Fulmarus glupischa, Salvin, Cat. Birds B. M. xxv. p. 427 (1896); Sharpe, Hand-l. i. p. 127 (1899).

The single egg of the Pacific Fulmar in the Collection resembles the eggs of *F. glacialis*, but is much smaller and of a smoother texture. It measures 2.65 by 1.8.

1. Kurile Islands (H. J. Snow).

Seebohm Coll.

## Genus DAPTION, Steph.

## Daption capensis (Linn.).

Daption capensis, Sharpe, Phil. Trans. 168. p. 118 (1879); Legge, Birds Ceyl. p. 1056 (1880); Salvin, Zool. Challenger' Exped. ii. pt. viii. p. 144 (1880); Scl. t. c. p. 151 (1880); Baird, Brewer & Ridgu. Water Birds N. Am. ii. p. 400 (1884); Buller, Birds New Zeal. 2nd ed. ii. p. 215 (1888); Salvin, Cat. Birds B. M. xxv. p. 428 (1896); Sharpe, Hand-l. i. p. 127 (1899); Hall, Ibis, 1900, p. 28.

The egg brought by the 'Challenger' Expedition, and attributed to the Cape Pigeon with some doubt, is spheroidal in shape, fairly smooth and plain white. It measures 2·12 by 1·75.

1. Kerguelen Island.

Voy. H.M.S. 'Challenger.'

## Genus HALOBÆNA, Is. Geoffir.

#### Halobæna cærulea (Gm.).

Halobena cerulea, Sharpe, Phil. Trans. 168. p. 141 (1879): Saunders, t. c. p. 165 (1879); Buller, Birds New Zeal. 2nd ed. ii. p. 214 (1888); Salvin, Cat. Birds B. M. xxv. p. 431 (1896); Sharpe, Hand-l. i. p. 127 (1899).

The eggs of the Blue Petrel vary from a broad oval to an elliptical form, and are smooth and often plain white. Some, however, are marked with numerous very minute rufous dots over the greater portion of the shell. They vary in size from 1.92 to 2 in length, and from 1.45 to 1.57 in breadth.

Kerguelen Island, 29th Oct. 1. (A. E. Eaton).

Royal Society [P.].

4. Kerguelen Island, 24th Nov. Royal Society [P.]. (A, E, E.).

#### Genus PRION, Lacép.

The eggs of the Petrels of this genus are for the most part elliptical in form, both ends of the eggs being quite similar. Oceasionally they are of a broad oval form and rarely spheroidal. They are fairly smooth in texture, plain white and glossless.

#### Prion vittatus (Gm.).

Prion vittatus, Gould, Handb. Birds Austr. ii. p. 474 (1865); Travers. Tr. N. Z. Inst. v. p. 220 (1872); Buller, Birds New Zeal. 2nd ed. ii. p. 212 (1888); Forbes, Ibis, 1893, p. 542; Salvin, Cat. Birds B. M. xxv. p. 432 (1896); Sharpe, Hand-l. i. p. 128 (1899). Prion australis, Potts, Ibis, 1873, p. 85.

The eggs of the Broad-billed Petrel measure from 1.85 to 2.06 in length, and from 1:35 to 1:45 in breadth.

St. Paul's Island, Indian Ocean. 3. St. Paul's Island, Jan. (J. MacGould Coll.

Voy. H.M.S. 'Herald.'

## Prion desolatus (Gm.).

Prion turtur, Travers, Tr. N. Z. Inst. v. p. 220 (1872); Buller, Birds New Zeal. 2nd ed. ii. p. 209 (1888); Le Souëf, Ibis, 1895, p. 418.

Prion desolatus. Sharpe, Phil. Trans. 168. p. 137 (1879); Saunders, t. c. p. 165 (1879); Salvin. Zool. 'Challenger' Exped. ii. pt. viii. p. 145 (1880); Scl. t. c. p. 151 (1880); Salvin. Cat. Birds B. M. xxv. p. 434 (1896); Sharpe, Hand-l. i. p. 128 (1899); Hall, Ibis, 1900, p. 29.

The eggs of the Dove-Petrel measure from 1.8 to 2.05 in length, and from 1.24 to 1.46 in breadth.

Kerguelen Island.

gillivray).

4. Kerguelen Island, 29th Nov.  $(\bar{A}, E, Eaton).$ 

1. Kerguelen Island, 13th Dec.  $(\breve{A}, E, E)$ .

Voy. H.M.S. 'Challerger.' Royal Society [P.].

Royal Society [P. .

## Family PELECANOIDID.E.

The eggs of the Petrels of this Family are either spheroidal or elliptical in form, but occasionally a specimen is of a broad oval shape. They are fairly smooth, quite glossless and plain white; but apparently they soon become discoloured.

## Genus PELECANOIDES, Lacép.

#### Pelecanoides urinatrix (Gm.).

Pelecanoides urinatrix, Sharpe, Phil. Trans. 168, p. 114 (1879); Saunders,
t. c. p. 164 (1879); Buller, Birds of New Zeal. 2nd ed. ii. p. 207 (1888); Forbes, Ibis, 1893, p. 541; Salvin, Cat. Birds B. M. xxv.
p. 437 (1896); Sharpe, Hand-l. i. p. 128 (1899).

Pelecanoides berardi, Buller, Birds of New Zeal. 2nd ed. ii. p. 208 (1888).

The eggs of the Diving Petrel measure from 1.3 to 1.55 in length, and from 1.1 to 1.3 in breadth.

- 2. Kerguelen Island (A. E. Eaton).
- Royal Society [P.].
- Kerguelen Island, 31st Oct. (A. E. E.). Royal Society [P.]
   Kerguelen Island, 19th Nov. (A. Royal Society [P.]
- $\widetilde{E}$ . E.).
- 3. Kerguelen Island, 27th Nov. (A. Royal Society [P.]. E. E.).

## Pelecanoides garnoti (Less.).

(Plate XII. fig. 8.)

Pelecanoides garnoti, Scl. Zool. 'Challenger' Evped. ii. pt. viii. p. 151 (1880); Salvin, t. c. p. 146 (1880); id. Cat. Birds B. M. xxv. p. 439 (1896); Sharpe, Hand-l. i. p. 128 (1899).

The three eggs of Garnot's Diving Petrel in the Collection measure respectively: 1.55 by 1.22; 1.55 by 1.25; 1.61 by 1.3.

Kerguelen Island.
 Falkland Islands.

Voy. H.M.S. 'Challenger. Voy. H.M.S. 'Challenger.

## Family DIOMEDEIDÆ.

The eggs of the Albatrosses are coarse in texture and without gloss. They are usually of an elongated oval form with the smaller end compressed and very often abruptly enlarged at the tip. They vary from dull white to pale yellow in colour, and the broad end is usually covered with a profusion of reddish-brown specks and dots which form a cap. These markings also frequently extend over a considerable portion of the shell.

#### Genus DIOMEDEA, Linn.

## Diomedea exulans, Linn.

Diomedea exulans, Thien. Fortpflanz. ges. Vög. tab. xcii. fig. 1 (1845–54);

Baedeker, Eier Eur. Vög. tab. 80. fig. 2 (1855–63); Gould, Handb.

Birds Austr. ii. p. 427 (1865); Layard, Ibis, 1867, p. 460; Bree,

Birds Eur. 2nd ed. v. p. 90, pl. — (1876); Baird, Brewer, &

Ridgw. Water Birds N. Am. ii. p. 347 (1884); Buller, Birds New

Zeal. 2nd ed. ii. p. 189 (1888); Sulvin, Cat. Birds B. M. xxv. p. 441

(1896); Sharpe, Hand-l. i. p. 128 (1899).

The two eggs of the Wandering Albatross in the Collection are white, very sparingly stippled with reddish brown at the larger end. They measure respectively: 4.85 by 3.1; 5.25 by 3.02.

2. Gough Island, South Atlantic Ocean. M. L. Bensusan, Esq. [P.].

#### Diomedea regia, Buller.

Diomedea exulans, Buller, Birds New Zeal. 2nd ed. ii. p. 189, part. (1888).

Diomedea regia, Salvin, Cat. Birds B. M. xxv. p. 443 (1896); Sharpe, Hand-l. i. p. 128 (1899).

The eggs of the Royal Albatross are of a dull yellowish white. Of the ten examples in the Collection, only one is marked with a few rufous specks on the larger end. They measure from 4.7 to 5.6 in length, and from 3 to 3.25 in breadth.

Auckland Islands.
 Auckland Islands, 3rd Dec.
 Campbell Island, New Zealand,
 McCormick Bequest.
 McCormick Bequest.

16th Dec.

## Diomedea chionoptera, Salvin.

Diomedea exulans, Sharpe, ed. Layard, Birds S. Africa, p. 770 (1875-84); Salvin, Zool. 'Challenger' Exped. ii. pt. viii. p. 147 (1880); Sclater, t. c. p. 151 (1880).

Diomedea chionoptera, Salvin, Cat. Birds E. M. xxv. p. 443 (1896); Sharpe, Hand-l. i. p. 128 (1899); Hall, Ibis, 1900, p. 12.

The eggs of the White-winged Albatross are dull white, with a large well-marked cap of rufous dots at the larger end. They measure from 5 to 5.4 in length, and from 2.9 to 3.3 in breadth.

Marion Island, Indian Ocean.
 Kerguelen Island.
 Crozet Islands.
 Crozet Islands.
 Crozet Islands.
 Galley, Esq. [P.].

## Diomedea albatrus, Pall.

Diomedea albatrus, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 351 (1884); Seebolm, Ibis, 1890, p. 105; id. Birds Japan. Emp. p. 261 (1890); Salvin, Cat. Birds B. M. xxv. p. 444 (1896); Sharpe, Hand-l. i. p. 128 (1899).

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The eggs of the Short-tailed Albatross are dull white, and are marked at the larger end with a profusion of red spots and blotches, many of which are confluent and form a very distinct cap. Isolated spots and markings of various sizes are often scattered over the shell. The eggs measure from 4.4 to 4.9 in length, and from 2.75 to 3.05 in breadth.

DIOMEDEA.

 Bonin Islands, Japan, Nov. (P. A. Seebohm Coll. Holst).

#### Diomedea irrorata, Salvin,

Diomedea irrorata, Salvin, Cat. Birds B. M. xxv. p. 445 (1896); Rot'lsch. & Hartert, Nov. Zool. vi. p. 192 (1899); Sharpe, Hand-l. i. p. 129 (1899).

The eggs of the Waved Albatross are dull white. Three specimens in the Collection are perfectly plain. Two others have a few pale purple spots and blotches at the broader end. They measure from 3.76 to 4.27 in length, and from 2.64 to 2.75 in breadth.

- Hood Island, Galapagos, 26th Oct. Webster-Harris Exped. (R. H. Beck).
- Hood Island, 26th Oct. (C. M. Webster-Harris Exped. Harris).
- Hood Island, 26th Oct. (F. P. Webster-Harris Exped. Drowne).

## Diomedea nigripes, Audub.

Diomedea nigripes, Baird, Brewer & Ridyw. Water Birds N. Am. ii. p. 355 (1884); Seebohm, Ibis, 1891, p. 191; Salvin, Cat. Birds B. M. xxv. p. 445 (1893); Sharpe, Hand-l. i. p. 129 (1899).

The sole egg of the Black-footed Albatross in the Collection is dull brownish white, without markings. It measures 4.2 by 2.5.

 Sulphur Island, Bonin Group, Japan, Seebohm Coll. 8th June (P. A. Holst).

## Diomedea melanophrys, Temm.

Diomedea melanophrys, Abbott, Ibis, 1861, p. 165; Gould, Handb. Birds Austr. ii. p. 438 (1865); Salvin, Zool. Challenger Exped. ii. pt. viii. p. 148 (1880); Scl. t. c. p. 151 (1880); Buller, Birds New Zeal. 2nd ed. ii. p. 198 (1888); Salvin, Cat. Birds B. M. XXV. p. 447 (1896); Sharpe, Hand-l. i. p. 129 (1899); Hall, Ibis, 1900, p. 17.

The eggs of the Black-cyebrowed Albatross are dull white, with a well-marked cap of ratious specks and blotches at the larger end. The three examples obtained by the 'Challenger' Expedition are of very different sizes and are said to be eggs of the first, second, and third year respectively. The smallest of these measures 3.8 by 2.1. Full-sized specimens measure from 3.8 to 4.5 in length, and from 2.45 to 2.7 in breadth.

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Falkland Islands (C. C. Abbott).

3. Falkland Islands (C. C. A.).

2. Falkland Islands (C. C. A.).

3. Falkland Islands.

Gould Coll.

Gould Coll.

Salvin-Godman Coll.

Vov. H.M.S. 'Challenger.'

#### Genus PHŒBETRIA, Reichenb.

#### Phœbetria fuliginosa (Gm.).

Diomedea fuliginosa, Layard, Ibis, 1867, p. 458; Sharpe, ed, Layard, Birds S. Africa, p. 773 (1875-1884); id. Phil. Trans. 168, p. 148 (1879); Saunders, t. c. p. 165 (1879); Buller, Birds New Zeal. 2nd ed. ii. p. 205 (1888).

Phœbetria fuliginosa, Campbell, Nests & Eggs Austr. Birds, p. 69 (1883); Salvin, Cat. Birds B. M. xxv. p. 453 (1896); Sharpe, Hand-l. i.

p. 129 (1899); Hall, Ibis, 1900, p. 18.

Of the four eggs of the Black Albatross in the Collection one is unspotted white; two are white, with a well-marked rufous cap at the larger end and some minute rufous specks over the remainder of the shell; and one is of a buff colour, minutely spotted all over, but more densely at the larger end than elsewhere, with vellowish brown and rufous. They measure from 3.6 to 4.2 in length, and from 2.4 to 2.7 in breadth.

1. Island of Tristan d'Acuuha.

1. Crozet Island (Capt. Armson).

Kerguelen Island, 13th Dec. (A. E. Eaton).

E. L. Layard, Esq. [P.]. E. L. Layard, Esq. [P.]. Royal Society | P.].

## Order ALCIFORMES.

The eggs of the birds of this Order vary much both in shape and eoloration. Some are white, but others can hardly be equalled for richness and variety of colour by the eggs of any other birds. In all eases they are very large and quite out of proportion to the size of the bird.

## Family ALCIDÆ.

## Subfamily ALCINÆ.

## Genus PLAUTUS, Brünnich.

## Plautus impennis (Linn.).

Alca impennis, Thien. Fortpflanz, ges. Vög. tab. ivc. (1845-54); Baedeker, Eier Eur. Vög. tab. 70. fig. 3 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 469, pl. exxix. (1856); Dresser, Birds Eur. viii. p. 563 (1880); Seebohm, Brit. Birds, iii. p. 371, pls. 40 & 41 (1885); Grieve, The Great Auk or Garefowl, passim (1885); Seebohm, Eggs of Brit. Birds, p. 91, pls. 27, 28 (1896).

Plautus impennis, Baird, Brewer & Ridgw., Water Birds N. Am. ii. p. 467 (1884); Grant, Cat. Birds B. M. xxvi. p. 563 (1898); Sharpe,

Hand-l, i. p. 130 (1899); Bidwell, Bull, Brit, Orn, Club, x. p. xxxiii (1899).

The British Museum possesses two eggs of the Great Auk. These two examples were glued down to boards and exposed to view in the general gallery for many years; they are consequently bleached and valueless.

Their history is doubtful, and I quote Mr. Symington Grieve's account (tom. cit., App. p. 29) of these two specimens:-" British Museum. These two eggs probably come from Bullock's collection. At the sale of Bullock's collection in 1819, two eggs were included in the catalogue (one at p. 31 and the other at p. 131). Both were bought by Leach, then keeper of the Zoological portion of the British Museum, and these are presumably the two eggs now in the Museum. One of them was actually packed in the same box in which Bullock's bird from Papa Westra was; but that does not necessarily lead to the conclusion that the egg came from Papa Westra. To judge from its age, Newfoundland is probably the place of its origin. According to other accounts, these two eggs originally belonged to Sir Hans Sloane, all of whose collections became part of the British Museum."

One of these, in fairly good order, measures 4.6 by 2.9. second one, a good deal broken but admitting of accurate measurement, measures 4.72 by 2.83. Both are broad ovals, inclining to

the pyriform.

The ground-colour is a dull creamy white, the shell rough and without gloss. In one specimen the markings, which consist of large, more or less confluent, dark brown blotches, are collected chiefly at the larger end, forming a cap; in the second the markings are spread over the whole shell, the larger ones, however, being confined to the broad end, where they do not form a distinct cap as in the first egg, but rather an irregular zone.

There are also casts of four eggs as noted below \*.

2. Of uncertain origin.

Old Collection.

## Genus ALCA, Linn.

## Alca torda, Linn.

Alca torda, Thien. Fortpflanz. ges. Vög. tab. iiic. fig. 3, a-g (1845-54); Baedeker, Eier Eur. Vög. tab. 15. fig. 2 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 468, pl. exxviii. (1856): Dresser, Birds Eur. viii. p. 557 (1877); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 472 (1884); Seebohm, Brit. Birds, iii. p. 375, pl. 42 (1885); id. Eggs of Brit. Birds, p. 92, pl. 24. figs. 1-4 (1896); Dicon, Ibis, 1885, p. 90; Grant, Cat. Birds B. M. xxvi. p. 565 (1898); Sharpe, Hand-l. i. p. 130 (1899).

Cast of egg in the collection of Prof. A. Newton.

1. Cast of egg formerly in the collection of Mr. A. Troughton, of Coventry.

Cast of egg in the collection of Mr. A. J. Wolley, and formerly in the possession of Mr. Gould.

1. Cast of egg from the collection of Mr. Yarrell.

The eggs of the Razerbill are generally regular ovals; occasionally specimens may be found with the two ends of much the same size. The shell is coarse, rather rough to the touch, and without any gloss. The ground-colour varies very greatly; white, pale blue, pink, stone-colour, yellow and reddish brown being the more prevalent tints. The markings vary from small specks to huge blotches, and are dark reddish brown, approaching, in many cases, to black. Some examples are marked entirely with specks; others with blotches, which have a tendency to be confluent round the larger end, and between these two types every variation may be found. The dimensions range from 2.7 to 3.1 in length, and from 1.72 to 1.95 in breadth. Three abnormally large eggs from Bempton, however, measure from 3.6 to 3.75 in length, and from 2.15 to 2.2 in breadth.

1.	America.	J. Walter, Esq. [P.].
2.	N. America (Henshaw Coll.).	Salvin-Godman Coll.
1.	Whalefish Island, N.W. America.	Dr. Robertson [P.].
1.	Labrador.	Sir Henry Peek [P.].
2.	Greenland, June.	Seebohm Coll.
6.	Greenland, July.	Col. H. W. Feilden [P.].
8.	Saltee Islands, Co. Wexford, 28th May.	Seebohm Coll.
4.	Hebrides (F. Walker: Hargitt Coll.).	Seebohm Coll.
15.	St. Kilda, June (C. Divon).	Seebohm Coll.
4.	Faröe Islands (Hargitt Coll.).	Seebohm Coll.
36.	Faröe Islands (H. C. Müller: Har-	Seebohm Coll.
	gitt Coll.).	
5.	Shetland (R. Dunn: Hargitt Coll.).	Seebohm Coll.
3.	Stromness, Orkneys (R. Dunn: Har-	Seebohm Coll.
	gitt Coll.).	
1.	Scotland (Hargitt Coll.).	Seebohm Coll.
1.	Sutherlandshire (J. A. Harvie-	Seebohm Coll.
	Brown: Hargitt Coll.).	
13.	Deebank, Aberdeen (Hargitt Coll.).	Seebohm Coll.
1.	Great Britain.	J. Walter, Esq. [P.].
4.	Farn Islands (II. Seebohm).	Seebohm Coll.
$2\sigma$ .	Bempton, Yorkshire (H. S.).	Seebohm Coll.
2.	Flamborough Head (Hargitt Coll.).	Seebohm Coll.
1.	Tenby, Wales.	Salvin-Godman Coll.
24.	St. Davids, Wales, 28th May.	Seebohm Coll.
1.	Lundy Island, Bristol Channel.	Seebohm Coll.
3.	Lundy Island (Charbonnier: Hargitt	Seebohm Coll.
	Coll.).	
10.	Stappen, Norway, 17th June (H.	Seebohm Coll.
	Seebohm).	
Ι.	Finland (MacGallen).	Seebohm Coll.

## Genus ALLE, Link.

#### Alle alle, Linn.

Alca alle, Thien. Fortpflanz. yes. Vöy. tab. vc. fig. 1, a-c (1845-54); Seebohm, Brit. Birds, iii. p. 380, pl. 45 (1885); id. Egys of Brit. Birds, p. 95, pl. 26, fig. 3 (1896).

Mergulus alle, Baedeker, Eier Eur. Vöy, tab. 70. fig. 2 (1855-63); Dresser, Birds Eur. viii. p. 591 (1877).

Arctica alle, Hewitson, Eggs of Brit. Birds, ii. p. 465, pl. exxvii. fig. i (1856).

Alle nigricans, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 463 (1884).

Alle alle, Grant, Cat. Birds B. M. xxvi. p. 569 (1898); Sharpe, Hand-l. i, p. 130 (1899).

The eggs of the Little Auk are very regular ovals, fairly smooth to the touch, but without any gloss. They are of a pale greenish blue, most frequently unmarked. A few specimens, however, exhibit some specks of yellowish brown and sometimes also some streaks and markings of the same colour round the larger end. They measure from 1.75 to 2.07 in length, and from 1.28 to 1.35 in breadth.

4. Greenland. Salvin-Godman Coll. 4. Greenland (R. Müller). Seebohm Coll. 4. Greenland, June (E. Fenéker). Seehohm Coll. North Greenland (II. Hawkins). Seebohm Coll. 2.Godhavn, Greenland. Seebohm Coll. 1. Godhavn, Greenland. Seebohm Coll. 4. Gronne, Greenland, 25th June. Seebohm Coll. Gronne, 3rd July. Seebohm Coll.

## Genus URIA, Briss.

## Uria troile (Linn.).

Uria ringvia, Thien. Fortpflanz. ges. Vög. tab. iic. fig. 1, α-c (1845–54); Baedeker, Eier Eur. Vög. tab. 69, fig. 1 (1855–63).

Uria troile, Thien. Fortpflanz. ges. Vöy. tab. iic. fig. 2, a-f (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 455, pl. exxiv. (1856); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 477 (1884); Dixon, Ibis, 1885, p. 89; Grant, Cat. Birds B. M. xxvi. p. 573 (1898);

Sharpe, Hand-l. i. p. 130 (1899).

Uria lomvia, Baedeker, Eier Eur. Vög. tab. 15. fig. 1 (1855-63).

Alea troile, Dresser, Birds Eur. viii. p. 567 (1877); Seebohm, Brit. Birds iii. p. 388, pls. 43 & 44 (1885); id. Eggs of Brit. Birds, p. 93, pl. 25 figs. 1-6 (1896).

The eggs of the Common Guillemot are of a long, narrow oval form, tapering to the small end, which is not unfrequently enlarged or swollen. The shell is rough in texture and without gloss.

They vary greatly in colour. The ground is of different shades of blue, green, brown, yellow, pink or buff, and frequently it is white. The underlying markings consist of blotches of grey or pale purple and are seldom prominent. The surface-markings, consisting of blotches, spots, streaks and lines of every conceivable shape, are of different shades of brown, reddish brown, chocolate and yellowish brown, and in many cases they are almost of a deep black. These markings are frequently of great extent and cover quite three-quarters of the surface of the shell; at other times they are merely spots, leaving almost the entire ground visible. Not a few examples are covered with a close entanglement of lines which produces a beautiful effect.

The magnificent series of eggs of this species in the Collection was arranged in groups by the late Mr. Seebohm and represents some thirty types or variations of coloration.

The eggs vary from 3 to 3.5 in length, and from 1.8 to 2 in breadth. Specimens of abnormal size are not included in these measurements. The smallest egg in the Collection measures 1.5 by 1.12.

Salvin-Godman Coll. Labrador (H. Bryant: Henshaw Coll.).

14. Rathlin Island, Ireland.

40. Saltee Islands, Ireland, May (H. Seebohm Coll. Seebohm).

St. Kilda, June (C. Dicon). 4.

14. Faröe Islands (H. C. Müller: Hargitt Coll.).

Orknevs.

Copinsha, Orkneys, June. 25.

Copinsha (Hargitt Coll.). 1. Bass Rock (H. Seebohm).

Deebank, Aberdeen (Hargitt Coll.). 3.

1. England.

3. Fain Islands.

Farn Islands, June. 3, Farn Islands, June (Hargitt Coll.). 114.

Farn Islands, June (H. Seebohm). 147. Bempton Cliffs, Yorkshire (H. S.).

145. Bempton Cliffs (H. S.: Hargitt Coll.).

4. Scarborough. ::1. Flamborough Head.

St. Davids, Wales, May & June. 14.

R. Lloyd Patterson, Esq. [P.].

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

J. Walter, Esq. [P.]. W. Thorburn, Esq. [P.].

Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll. Seebohm Coll.

W. Rooke, Esq. [P.]. Lord Londesborough [P.].

Seebohm Coll.

## Uria californica (Bryant).

Uria troile californica, Baird, Brewer & Ridgw. Water Birds A. Am. ii. p. 483 (1884): Nelson, Report Nat. Hist. Alaska, p. 45 (1887). Uria troile, Grant, Cat. Birds B. M. xxvi. p. 573, part. (1898). Uria californica, Sharpe, Hand-l. i. p. 130 (1899).

The five eggs of the Californian Guillemot in the Collection are of different types, all of which can, however, be matched by eggs of U. troile.

N. America (W. Frazer).

N. America (Smiths. Inst.). 1.

Farallone Islands, California (F. Grueber: Henshaw Coll.).

Purchased.

Salvin-Godman Coll.

Salvin-Godman Coll.

## Uria lomvia (Pull.).

Uria lomvia, Thien. Fortpflanz, ges. Vog. tab. iic. fig. 1, a-e (1845-54); Grant, Cat. Birds B. M. xxvi. p. 577 part. (1898); Sharpe, Hand-l. i. p. 130 (1899).

Uria arra, Baedeker, Eier Eur. Vog. tab. 69, fig. 2 (1855-63).

Uria brunnichii, Hewitson, Eggs of Brit. Birds, ii. p. 460, pl exxv. (1856).

Alca bruennichi, Dresser, Birds Eur. viii, p. 575 (1877); Seebohm, Eggs of Brit. Birds, p. 94, pl. 26, figs. 5, 6 (1896),

Uria lomvia lomvia, Baird, Brewer & Ridgw. Water Birds N. Am. ii.

p. 485 (1884).

Alca troile brunnichi, Seebohm, Brit. Birds, iii. p. 388, pls. 43, 44 (1885).

The eggs of Brünnich's Guillemot resemble those of U. troile, but are perhaps, on the whole, less boldly marked. They vary in size from 2.95 to 3.5 in length, and from 1.8 to 2.15 in breadth.

Dudley Diggs, Baffin Bay.

Frow Islands, N.W. America. G.

12. Sanderson's Hope, Greenland, 22nd July (Col. H. W. Feilden).

3. Greenland. 1. Greenland.

1.

Disco, Greenland.

1. Egedes-minde, Greenland. 1. Godhavn, Greenland.

3. Sukkestappen, Greenland. Iceland (W. Proctor).

1. Novaya Zemlya, 7th June.

Novaya Zemlya. 1.

Spitsbergen, 78°-79° N. lat., July.

Cape Flora, Franz Josef Land, 30th June.

Salvin-Godman Coll. Dr. Robertson [C.].

Voy. H.M.S. 'Alert.'

Gould Coll.

Salvin-Godman Coll.

McCormick Bequest. Seebolm Coll.

Seebohm Coll. Seebohm Coll.

Salvin-Godman Coll.

Admiral A. Markham [P.].

Seebohm Coll.

Seebohm Coll. F. G. Jackson, Esq. [P.].

#### Uria arra (Pall.).

Uria lomvia arra, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 485 (1884): Nelson, Report Nat. Hist. Alaska, p. 45 (1887). Alca troile arra, Seebohm, Brit. Birds, iii. p. 388 (1885). Alca troile, Seebohm, Birds Japan, Emp. p. 273, part. (1890).

Uria Iomvia, Grant, Cat. Birds B. M. xxvi. p. 577, part. (1898).

Uria arra, Sharpe, Hand-l. i. p. 131 (1899).

The eggs of the Thick-billed Guillemot resemble those of U. troile and U. lomvia, but, taken as a whole, they appear to be characterized by the paucity of their markings.

•) Japan (H. Pryer).

4. Kurile Islands, Japan (H. J. Snow).

11. Commander Islands.

St. George's Island, Bering Sea, 27th June (II. W. Elliott: Henshaw Coll.).

St. Michael's, Alaska, 30th Aug. Salvin-Godman Coll. (Henshaw Coll.).

Seebohm Coll. Seebohm Coll.

G. E. H. Barrett-Hamilton, Esq.  $[P_i]$ .

Salvin-Godman Coll.

## Genus CEPPHUS, Pall.

## Cepphus grylle (Linn.).

Uria grylle, Thien, Fortpflanz. ges. Vög. tab. iiic. fig. 1, a-e (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 462, pl. exxvi. (1856): Dresser, Birds Eur. viii. p. 581 (1877); Grant, Cat. Birds B. M. xxvi. p. 580 (1898).

Grylle columba, Baedeker, Eier Eur. Vög. tab. 70. fig. 1 (1855). Cepphus grylle, Baird, Brewer & Ridgw. Water Birds N. Am. ii, p. 492

(1884); Sharpe, Hand-l. i. p. 131 (1899).

Alca grylle, Seebohn, Brit. Birds, iii. p. 383, pl. 45 (1885); id. Eggs of Brit. Birds, p. 94, pl. 26, fig. 4 (1896).

It is possible that some of the eggs enumerated below may appertain to the closely allied race or species, C. mandti, but there is no evidence to determine this.

The eggs of the Black Guillemot are quite different from those of Uria troile. They are of a regular broad oval form, slightly rough, and they possess a small amount of gloss. The groundcolour varies from a creamy white to pale blue pink or pinkish The markings, which consist of spots and blotches, are pretty evenly distributed over the shell and are of a deep brown, black, yellowish brown or chocolate colour. In addition, there are underlying pale purple markings. Not unfrequently the markings form a confluent broad zone round the larger end. Specimens measure from 2.1 to 2.55 in length, and from 1.4 to 1.7 in breadth.

N. America (Henshaw Coll.).

Hudson's Bay.

James Bay, Hudson's Bay (C. Drevler: Henshaw Coll. ex Smiths. Inst.).

5. Labrador.

Fortune Bay, Newfoundland, 10th July.

Fortune Bay, 10th July.

2. S. Greenland, June (R. Müller: Hargitt Coll.).

S. Greenland, 21st June (R. M.: Hargitt Coll.).

2. S. Greenland, 21st June (R. M.: Hargitt Coll.).

2. S. Greenland, 25th June (R. M.: Hargitt Coll.).

2. Greenland, June (R. M.: Hargitt Coll.).

Godthaab, Greenland, 18th June.

4. Greenland (E. Fenéker: Hargitt Coll.).

2. Faröe Islands, 26th May (II. C. Müller: Hargitt Coll.).

3. Faroe Islands, June (H. C. M.: Hargitt Coll.).

8. N. Uist, 6th June (E. V. Scebohm).

3. Fair Island, Orkneys.

2. Co. Waterford, 10th May (R. J. Ussher).

6. Kistrand, Norway, 21st June.

Esthonia, Russia, 18th June.

Salvin-Godman Coll.

Gould Coll.

Salvin-Godman Coll.

Sir II. Peek [P.].

Col. II. W. Feilden [P.].

Col. II. W. Feilden [P.]. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

E. M. Nelson, Esq. [P.].

Seebohm Coll.

Seebohm Coll. Seebohm Cell.

#### Genus PSEUDURIA, Sharpe.

#### Pseuduria columba (Pall.).

Cepphus columba, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 494 (1884).

Uria columba, Grant, Cat. Birds B. M. xxvi. p. 586 (1898). Pseuduria columba, Sharpe, Hand-l. i. p. 131 (1899).

The eggs of the Pigeon Guillemot do not differ in any way from those of Cepphus grylle.

 Rosario Channel, Vancouver Island, Voy. H.M.S. 'Plumper.' 8th June (Dr. Loull)

8th June (*Dr. Lyall*), 2. Rosario Channel, 10th June (*Dr.* Voy. II M.S. 'Plumper.'

Lyall).
5. Waldron Island, Vancouver Island Voy. H.M.S. 'Plumper.'

(Dr. Lyall).
4. Waldron Island, 23rd June (Dr. Voy. H.M.S. 'Plumper.'
Luall).

2. Santa Cruz Island, California, 5th Salvin-Godman Coll. June (Henshaw Coll.).

1. Lake Begles, California (F. Gruber). Purchased.

## Pseuduria snowi (Stejn.). (Plate XII. fig. 6.)

Uria columba, Blakiston & Pryer, Trans. As. Soc. Jap. x. p. 91 (1882); Seebohm, Ibis, 1884, p. 174.

Alca columba, Seebohn, Birds Japan, Emp. p. 275, part. (1890). Uria snowi, Grant, Cat. Birds B. M. xxvi. p. 588 (1898). Pseuduria snowi, Sharpe, Hand-l. i. p. 131 (1899).

The single egg of Snow's Guillemot in the Collection resembles some of the eggs of Cepphus grylle. The ground is of a pale blue, and this is marked pretty evenly all over with blotches and spots of chocolate-brown and pale purple. It measures 2.45 by 1.53.

1. Kurile Islands, Japan (H. J. Snow). Seebohm Coll.

## Sub-Family FRATERCULINÆ.

## Genus PTYCHORHAMPHUS, Brandt.

## Ptychorhamphus aleuticus (Pall.). (Plate XII. fig. 5.)

Ptychorhamphus aleuticus, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 517 (1884); Grant, Cat. Birds B. M. xxvi. p. 599 (1898); Sharpe, Hand-l. i. p. 132 (1899).

The eggs of the Aleutian Auk are of a broad oval form, chalky

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in texture, glossless and pale bluish white. Four examples measure respectively: 1.75 by 1.25; 1.8 by 1.24; 1.67 by 1.2; 1.7 by 1.25.

 St. Geronimo Island, Lower California, 16th March.

#### Genus SIMORHYNCHUS, Merrem.

The eggs of the Auks of this genus are of a pointed oval form, fairly smooth, glossless and plain white.

## Simorhynchus cristatellus (Pall.).

Simorhynchus cristatellus, Baird, Brewer & Ridgw. Water Birds N. Am.
ii. p. 512 (1884); Grant, Cat. Birds B. M. xxvi. p. 601 (1898);
Sharpe, Hand-l. i. p. 132 (1890).
Fratercula cristatella, Seebohm, Birds Japan. Emp. p. 285 (1890).

The single egg of the Crested Auk in the Collection measures  $2\cdot12$  by  $1\cdot4$ .

1. Kurile Islands, Japan (H. J. Snow). Seebohm Coll.

# Simorhynchus pusillus (Pall.). (Plate XII. fig. 7.)

Ciceronia pusilla, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 507 (1884).

Simorhynchus pusillus, Grant, Cat. Eirds B. M. xxvi. p. 605 (1898); Sharpe, Hand-l. i. p. 132 (1899).

The eggs of the Knob-billed Auk measure from 1.5 to 1.68 in length, and from 1.05 to 1.15 in breadth.

- 3. St. George's Island, Pribyloff Group, Bering Sea, June (H. H. Elliott: Henshaw Coll.).
- 3. St. Paul's Island, Pribyloff Group, G. E. H. Barrett-Hamilton, 24th-30th June. Esq. [P.].

## Genus LUNDA, Pall.

## Lunda cirrhata (Pall.).

Alea cirrhata, Thien. Fortyflanz. ges. Uvy. tab. vc. fig. 6 (1845-54). Lunda cirrhata, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 532 (1884); Grant, Cat. Birds B. M. xxvi. p. 612 (1898); Sharpe, Hand-l. i. p. 133 (1899). Fratercula cirrhata, Seebohm, Birds Japan Emp. p. 281 (1890).

The eggs of the Tufted Puffin are regular ovals with the small end rather pointed; the texture chalky and glossless. They are either plain white, or white mottled with a few pale grey markings; they become much discoloured with incubation. They measure from 2.65 to 3.03 in length, and from 1.81 to 1.96 in breadth.

2. North America (Smiths. Inst.).

2. Lake Begles, California (F. Grüber).

5. Haro Channel, Vancouver Island (Dr. Lyall).

7. Bering Isl., Commander Group, 12th July.

1. Kurile Island, Japan (II. J. Snow).

Salvin-Godman Coll.

Purchased.

Voy. H.M.S. 'Plumper.'

G. E. H. Barrett-Hamilton, Esq. [P.].

Seebohm Coll.

#### Genus FRATERCULA, Briss.

## Fratercula arctica (Linn.).

Alca arctica, Thien. Fortpflanz, ges. Vög. tab. vc. fig. 7, a-e (1845-54).
Fratercula arctica, Baedeker, Eier Eur. Vög. tab. 80, fig. 6 (1855-63);
Hervitson, Eggs of Brit. Birds, ii. p. 466, pl. exxvii. fig. ii (1856);
Dresser, Birds Eur. viii. p. 599 (1877); Baird, Brewer & Ridge, Water Birds N. Am. ii. p. 524 (1884); Seebohm, Brit. Birds, iii. p. 364, pl. 45 (1885); iil. Eggs of Brit. Birds, p. 96, pl. 26, figs. 1, 2 (1896); Dicon, Ibis, 1885, p. 91; Grant, Cat. Birds B. M. xxvi. p. 616 (1898); Sharpe, Hand-l. i. p. 133 (1899).

The eggs of the Puffin are of a rather pointed oval form, rough, chalky, and without gloss. The ground is white or bluish white, and this is spotted and blotched with pale purple or grey, and frequently it is also marked with some yellowish-brown spots and streaky scrawls. In some specimens, the markings are larger and more prominent than in others. Some examples have so few markings, and these are so small, that until closely examined they appear to be of a spotless white. With incubation, the shell becomes of a dark mahogany-brown colour. They measure from 2·15 to 2·7 in length, and from 1·55 to 1·75 in breadth.

1. Labrador.

Greenland, 22nd June.

1. Greenland (Whiteaves: Montreal Museum).

1. West Greenland.

3. Saltee Islands, Ireland, 28th May (H. Saunders).

5. Faröe Islands (H. C. Müller: Hargitt Coll.).

2. Faröe Islands (II. C. Müller).

6. St. Kilda (C. Divon).

12. Farn Islands, 1st June (E. Hargitt). 10. Farn Islands, 28th May (H. See-

bohm).
4. Farn Islands, 24th May (E. I

4. Farm Islands, 24th May (E. V. Seebohm).

2. N. Warmsey, Farn Islands, 18th June (O. Salvin).

1. Tenby, Wales.

3. Lundy Island, Bristol Channel, May (II. Saunders).

2. Penzance.

Sir H. Peek [P.]. Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

Seebohm Coll.

D. W. Mitchell, Esq. [P.].

#### Fratercula corniculata (Naum.).

Fratercula corniculata, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 529 (1884); Grant, Cat. Birds B. M. xxvi. p. 620 (1898); Sharpe, Hand-l. i. p. 133 (1899).

The two eggs of the Horned Puffin in the Collection resemble many of the eggs of *F. arctica*, but are larger. They are sparingly blotched with very pale purple and they have, in addition, a few yellowish-brown lines and veins. They measure respectively: 2·8 by 1·91; 2·66 by 1·75.

 Toporkoff Island, Bering Sea, 12th July.

Copper Island, Bering Sea.

G. E. H. Barrett-Hamilton, Esq. [P.].

Esq. [P.]. G. E. H. Barrett-Hamilton, Esq. [P.].

#### Order LARIFORMES.

The identification of the eggs of the Terns, Gulls and Skuas presents great difficulties, and they should always be particularly well authenticated at the time they are taken from the nest.

The eggs of the *Lariformes* are usually of a regular oval form, but numerous specimens depart from this, and are spheroidal, pyriform or elliptical. The shell is slightly rough and seldom exhibits any gloss. The markings are invariably of two kinds: the surface-markings, which are usually of some shade of brown or occasionally black; and the shell-markings underlying the others, which are usually of a pale purple colour.

The eggs of the *Lariformes* in some instances resemble those of some species of the *Ralliformes*, and in others those of many species of the *Charadriformes*.

## Family LARIDÆ.

Sub-Family STERNINÆ.

## Genus HYDROCHELIDON, Boie.

## Hydrochelidon leucoptera (Meisn. & Schinz).

Sterna leucoptera, Thien. Fortpflanz, ges. Vög. tab. lxxxv. fig. 4, a-f (1845-54); Seebohm, Brit. Birds, iii. p. 257, pl. 49 (1885); id. Eggs of Brit. Birds, p. 98, pl. 29. figs. 4, 6 (1896).

Hydrochelidon leucoptera, Baedeker, Eier Eur. Vög. tab. 32. fig. 2 (1855-63); Dresser, Birds Eur. viii. p. 321 (1875); Legge, Birds Ceyl. p. 1000 (1880); Saunders, Cat. Birds B. M. xxv. p. 6 (1896); Sharpe, Hand-l. i. p. 133 (1899).

The eggs of the White-winged Black Tern cannot be separated

from those of the Black Tern, described below. The specimens in the Collection measure from 1.35 to 1.42 in length, and from .95 to 1.05 in breadth.

Hungary, 12th June (T. Holland). Volga, Russia. 3.

S.E. Russia.

Southern Europe.

Seebohm Coll. Saunders Coll.

Saunders Coll.

R. T. Frere, Esq. [P.].

## Hydrochelidon hybrida (Pall.).

Sterna hybrida, Thien. Fortpflanz. ges. Vog. tab. lxxxv. fig. 1, a-f (1845-54); Seebohm, Brit. Birds, iii. p. 260, pl. 49 (1885); id. Eggs of Brit. Birds, p. 98, pl. 29, figs. 8, 10 (1896); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 305 (1890).

Hydrochelidon hybrida, Baedeker, Eier Eur. Vög. tab. 32. fig. 1 (1855-63); Saunders, Ibis, 1871, p. 399; Dresser, Birds Eur. viii, p. 315 (1877); Legge, Birds Ceyl. p. 996 (1880); North, Nests & Eggs Austr. Birds, pp. 353, 492 (1889); Irby, Orn. 8tr. Gibr. 2nd ed. p. 292 (1895); Saunders, Cat. Birds B. M. xxv. p. 10 (1896); Sharpe, Hand-l. i. p. 133 (1899).

The eggs of the Whiskered Tern are generally of a regular oval shape, and pyriform examples are comparatively few in number. The ground varies from cream-colour to buff, and about half the number of the specimens in the Collection are distinctly tinged with green. The markings, which consist of spots and small blotches, are of a reddish-brown or blackish-brown colour, and they cover about one-quarter of the surface of the shell. The underlying markings are dull grey or pale purplish brown. The eggs vary from 1:39 to 1.65 in length, and from 1.02 to 1.2 in breadth.

Doñana, Spain, 4th June (H. 3. Saunders).

Donana, 4th June (H. Saunders), 6. San Lucar, Spain, June (H. S.). 7.

2. South Spain.

2. 7. Seville, Spain (L. II. Irby). Seville, Spain, June (Ruiz). Gibraltar, May (L. II. Irby). 3.

Lake Halloula, Algeria (Capt. Loche). 4. Dobrudscha (H. F. Möschler). 3. Wullur Lake, Kashmir, 8th June.

1 I . Kashmir. 7.

Kashmir, 8th June (W. E. Brooks). 4.

Etawah, 14th Aug. (A. O. Hume). 4. 3. Futtehgurh (A. Anderson).

3.

Futtehgurh (A. A.).

Seebohm Coll.

Saunders Coll. Saunders Coll. Lord Lilford [P.].

Seebohm Coll. Seebohm Coll.

Seebohm Coll. Salvin-Godman Coll.

Seebohm Coll. Hume Coll.

Hume Coll. Hume Coll.

Hume Coll. Saunders Coll.

Saunders Coll.

## Hydrochelidon nigra (Linn.).

Sterna nigra, Thien. Fortpflanz. ges. Voy. tab. lxxxv. fig. 5, a-f (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 488, pl. cxxxv. (1856): Seebohm, Brit. Birds, iii. p. 254, pl. 49 (1885); id. Eggs of Brit. Birds, p. 97, pl. 31. figs. I, 3 (1896).

Hydrochelidon fissipes, Baedeker, Eier Eur. Vöj. tab. 32. fig. 3 (1855–63); Saunders, Ibis, 1871, p. 399.

Hydrochelidon nigra, Dresser, Birds Eur. viii. p. 327 (1876); Saunders, Cat. Birds B. M. xxv. p. 17 (1896); Sharpe, Hand-l. i. p. 133 (1899).

The eggs of the Black Tern vary from a pointed oval form to pyriform. The ground-colour ranges from pale buff to brownish buff, and this is heavily blotched and spotted with reddish brown and blackish brown. With few exceptions, these markings cover quite half the surface of the shell and are often confluent, especially over the broader half. The underlying markings are numerous and of a dull grey colour. Specimens measure from 1·3 to 1·46 in length, and from ·9 to 1·05 in breadth.

Coto del Rey, Spain (Lord Lilford). Saunders Coll.
 South Spain. Lord Lilford [P.].
 Valkenswaard, Holland, 26th May (H. Seebohm).
 Valkenswaard (H. Bridges). Saunders Coll.

Valkenswaard (W. Bridges).
 Holland (T. Baker).
 Salvin-Godman Coll.

5. Holland. Lord Lilford [P.]. 14. Kassarien River, Esthonia Seebohm Coll.

(Russow).
2. Garde See, Pomerania, 26th May Seebohm Coll.
(H. Seebohm).

12. Garde See, 30th May (II. S.). Seebohm Coll.

## Hydrochelidon surinamensis (Gm.).

(Plate XIII. fig. 5.)

Hydrochelidon nigra surinamensis, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 318 (1884).

Hydrochelidon surinamensis, Saunders, Cat. Birds B. M. xxv. p. 20 (1896); Sharpe, Hand-l. i. p. 134 (1899).

The eggs of the American Black Tern are absolutely undistinguishable from the eggs of *H. leucoptera* and *H. nigra*.

 Little Slave Lake, Canada (S. Jones: Salvin-Godman Coll. Henshaw Coll.).

13. Chicago (C. E. Aiken: Henshaw Salvin-Godman Coll. Coll.).

## Genus PHAËTHUSA, Wayler.

## Phaëthusa magnirostris (Licht.).

(Plate XIII. fig. 8.)

Sterna magnirostris, Thien. Fortpflanz. ges. Vög. tab. lxxxii. fig. 6 (1845-54).

Thalasseus magnirostris, Scl. & Salv. P. Z. S. 1866, p. 200.

Phaëthusa magnirostris, Scl. & Huds. Argent. Orn. ii. p. 194 (1889); Saunders, Cat. Birds B. M. xxv. p. 23 (1896); Sharpe, Hand-l. i. p. 134 (1899). The eggs of the Great-billed Tern resemble many of those of the Gull-billed Tern. They are of a broad oval or elliptical shape. The ground is of a yellowish-buff colour, and it is marked, pretty evenly all over, with spots and small blotches of yellowish brown and pale purple. On some specimens the markings consist of short thick lines and scrawls. The eleven examples measure from 1.73 to 1.97 in length, and from 1.35 to 1.41 in breadth.

11. Ucayali River, E. Peru, 10th Sept. Saunders Coll. (E. Bartlett).

#### Genus GELOCHELIDON, Brehm.

#### Gelochelidon anglica (Mont.).

Sterna anglica, Thien. Fortpflanz. ges. Vög. tab. lxxxii. fig. 7, a-i (1845–54); Saunders, Ibis, 1871, p. 398; Dresser, Birds Eur. viii. p. 295 (1877); Baird, Brewer & Ridyw. Water Birds N. Am. ii. p. 277 (1884); Seebohm, Brit. Birds, iii. p. 263, pl. 47 (1885); North, Nests & Eygs Austr. Birds, p. 355, pl. xvii. fig. 2 (1889); Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 304 (1890); Sharpe, Ibis, 1891, p. 116; Holland, Ibis, 1892, p. 212; Seebohm, Eygs of Brit. Birds, p. 99, pl. 31. figs. 6, 8 (1896).

Gelochelidon anglica, Baedeker, Eier Eur. Vöy. tab. 24. fig. 3 (1855-63);
Salvin, Ibis, 1859, p. 364; Saunders, Cat. Birds B. M. xxv. p. 25 (1896); Sharpe, Hand-l. i. p. 134 (1899).

The eggs of the Gull-billed Tern are broad ovals, sometimes slightly pointed at the small end. The ground varies from a greyish or buffish white to a pale buff, stone-colour or brown. The markings are of small size and are, as a rule, evenly distributed over the shell. They consist of spots and blotches of dark brown or olive-brown and very prominent underlying grey.

The above description applies to eggs from the Old World and N. America. Those taken in South America are more varied, the ground being frequently tinged with pale yellow, pale green or pale blue, and the markings being much larger and consisting, very often, of coarse blotches and streaks. They vary from 1.8 to 2.2 in length, and from 1.3 to 1.57 in breadth.

- 8. Marisma, South Spain.
- San Lucar, Spain, May.
   Jutland, 6th June (T. Holland).
- 3. Sporring, Jutland (T. II.).
- 29. Missolonghi, Greece, May (H. Seebohm).
- 8. Missolonghi, May (W. II. Simpson).
- 3. Missolonghi, 25th May.
- 4. Greece.
- 1. Greece.
- 1. Zana, Algeria (O. Salvin).
- 25. Smyrna, Asia Minor, June (II. Seebohm).

- Lord Lilford [P.].
- Saunders Coll.
- Seebohm Coll. Seebohm Coll.
- Seebohm Coll.
- Salvin-Godman Coll.
- Saunders Coll.
- Saunders Coll. Saunders Coll.
- Salvin-Godman Coll.
- Seebohm Coll.

6.	Koormouza, Persian Gulf, May.	W. D. Cumming, Esq. [P.]	
300.	Warba Island, Persian Gulf,	Hume Coll.	
	3rd April (E. A. Butler).		
2.	North America, 29th May.	Saunders Coll.	
$\frac{1}{2}$ .	Hog Island, Virginia (R. B. Hitz:	Salvin-Godman Coll.	
	Henshaw Coll.).		
2.	Hog Island, 1st July.	W. E. D. Scott, Esq. [C.].	)
ī.	Cobbs Island, Virginia, 15th June.	, , , , , , , , , , , , , , , , , , , ,	P
1.	Cobbs Island, 15th June.	",	ĬĔ.
3.	Cobbs Island, 17th June.	" "	i e
2.	Cobbs Island, 17th June.	"	100
4.	Cobbs Island, 17th June.	,, ,,	
1.	Cobbs Island, 23rd June.	,, ,,	E.
2.	Cobbs Island, 23rd June.	,,	ve
1.	Cobbs Island, 23rd June.	"	18.
3.	Cobbs Island, 23rd June.	,, ,,	धु
2.	Cobbs Island, 23rd June.	,, ,,	12
1.	Cobbs Island, 27th June.	,, ,,	1 =
2.	Cobbs Island, 27th June.	",	١÷
1.	Cobbs Island, 3rd July.	,,	Princeton University, N.J. [E.].
$^{2}.$	Cobbs Island, 3rd July.	,, ,,	ب ر
45.	Argentine Republic, Dec.	A. H. Holland, Esq. [C.].	

#### Genus HYDROPROGNE, Kaup.

#### Hydroprogne caspia (Pall.).

Sterna caspia, Thien. Fortpflanz, ges. Vög. tab. lxxxiii. fig. 1, α-e (1845–54); Hewitson, Egys of Brit. Birds, ii. p. 477, pl. cxxxi. figs. ii, ii (1856); Potts, Tr. N. Z. Inst. ii. p. 76 (1869); Dresser, Eirds Eur. viii. p. 289 (1877); Seebohm, Ibis, 1883, p. 398; Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 280 (1884); Seebohm, Brit. Birds, iii. p. 268, pl. 47 (1885); Outes ed. Hume, Nests & Eggs Ind. B. iii. p. 295 (1890); Sharpe, Ibis, 1891, p. 115; Seebohm, Eggs of Brit. Birds, p. 100, pl. 31. fig. 2 (1896).

Hydroprogne caspia, Baedeker, Eier Eur. Vög. tab. 24. fig. 1 (1855-63); Legge, Birds Ceyl. p. 1008 (1880); Saunders, Cat. Birds B. M. xxv.

p. 32 (1896); Sharpe, Hand-l. i. p. 134 (1899).

Sylochelidon caspia, Gould, Handb. Birds Austr. ii. p. 392 (1865); North, Nests & Eggs Austr. Birds, p. 352, pl. xx. fig. 3 (1889).

The eggs of the Caspian Tern are very much larger than the eggs of the Gull-billed Tern, but resemble them closely in shape and coloration. They pass through the same variations as the eggs of that species taken in Europe and Asia. Specimens measure from 2.3 to 2.75 in length, and from 1.7 to 1.9 in breadth.

6.	Island of Sylt, N. Frisian Is.	Saunders Coll.
5.	Island of Sylt (Kjærbölling).	Salvin-Godman Coll.
1.	Island of Sylt (Hargitt Coll.).	Seebohm Coll.
5.	Dobrudscha, Black Sea, 10th June.	Seebohm Coll.
1.	Abdulla Bank, Persian Gulf, 24th	W. D. Cumming, Esq. [P.].

April.
2. Persian Gulf (E. A. Butler).

Saunders Coll.

106. Warba Island, Persian Gulf, 3rd April (E. A. B.).

Hume Coll

3. Bass Straits, Australia.

13.

1. Sind.

4.

India.

Wazirabad, 9th May.

Gould Coll

Hume Coll.

Hume Coll.

#### Genus SEENA, Bluth.

#### Seena seena (Sykes).

(Plate XIII. fig. 7.)

Sterna seena, Legge, Birds Ceyl. p. 1003 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 308 (1890). Seena aurantia, Saunders, Cat. Birds B. M. xxv. p. 37 (1896). Seena seena, Sharpe, Hand-l. i. p. 134 (1899).

The eggs of the Indian River-Tern are of a very broad oval form, extremely blunt at the smaller end, and frequently almost elliptical in shape. The ground varies, being sometimes a greenish grey or pale greenish stone-colour, and at other times a pale buff or dark cream-colour, occasionally tinged with pink or with olivaceous. The markings, which are deep brown of one shade or another, consist of small blotches, spots, short lines and irregular streaks, and are fairly evenly distributed over the shell. In a small proportion of the specimens, the blotches are large, coarse, and few in number. The underlying markings consist of clouds and spots of pale purple. The eggs measure from 1.5 to 1.75 in length, and from 1.17 to 1.32 in breadth.

Hume Coll. 4. Delhi, 14th May (C. T. Bingham). Hume Coll. 9. Mirzapur, 25th March. Hume Coll. Allahabad, 7th Feb. (A. O. Hume). 117. Hume Coll. Allahabad, 15th Feb. (A. O. H.). Hume Coll. Allahabad, 7th March (A. O. H.). 75. Hume Coll. 7. Allahabad, 14th March (A. O. H.). Hume Coll. Allahabad, 18th March (A. O. H.). Hume Coll. Etawah, 12th-15th March (A. Hume Coll. O.~H.). 2. Etawah, 16th March (A. O. H.). Hume Coll. 2. Etawah, 16th March (A. O. H.). Hume Coll. 29. Port Canning, Calcutta, 3rd April. Hume Coll. 4. Futtehgurh, 5th April (A. Ander-Saunders Coll. son). 1. Futtehgurh, 19th April (A. A.). Saunders Coll. 5. Futteligurh, 26th April (A. A.). Saunders Coll. Futtehgurh, 30th April (A. A.). 3. Saunders Coll.

Genus STERNA, Linn.

Sterna melanogaster, Temm.

(Plate XIII. fig. 6.)

Sterna melanogaster, Legge, Birds Ceyl. p. 1006 (1880); Oates ed. Hume, n2

180 LARIDÆ.

Nests & Eygs Ind. B. iii. p. 310 (1890); Saunders, Cat. Birds B. M. xxv. p. 43 (1896); Sharpe, Hand-l. i. p. 134 (1899).

The eggs of the Black-bellied Tern are broad, pointed ovals. The ground varies from cream-colour to buff, sometimes tinged with very pale green. The markings are small and consist of specks, streaks and spots of yellowish brown, chocolate-brown and, in some cases, of black. These are somewhat sparingly distributed over the whole shell. The underlying markings are large, conspicuous, and of a pale purple colour. Two examples in the Collection are of a plain, unspotted, pale blue. Specimens vary from 1·1 to 1·5 in length, and from ·88 to 1·02 in breadth.

10.	Eastern Narra, Sind (S. Doig).	Hume Coll.
1.	Allahabad.	Hume Coll.
9.	Allahabad, 14th March.	Hume Coll.
18.	Allahabad, 16th March.	Hume Coll.
$^2$ .	Allahabad, 18th March.	Hume Coll.
1.	Futtehgurh, 3rd April (A. Ander-	Saunders Coll.
	son).	
2.	Delhi.	Hume Coll.
5.	Etawah, 12th March (A. O. Hume).	Hume Coll.
1.	Etawah, 16th March (A. O. H.).	Hume Coll.
2.	Etawah, 6th April (A. O. H.).	Hume Coll.
	Wazirabad, 9th March.	Hume Coll.

#### Sterna forsteri, Nutt.

(Plate XIII. fig. 4.)

Sterna forsteri, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 292 (1884); Saunders, Cat. Birds B. M. xxv. p. 46 (1896); Sharpe. Hand-l. i. p. 134 (1899).

The eggs of Forster's Tern are of a regular but somewhat narrow oval form. The ground is of a pale greyish green or pale buff colour, and this is pretty thickly and evenly marked with spots and blotches of dark blackish brown and underlying pale purple. They measure from 1.65 to 1.76 in length, and from 1.13 to 1.25 in breadth.

2. I. 1.	North America (H. E. Dresser). North America (T. M. Brewer). Shoal Lake (D. Gunn: Smiths.	Salvin-Godman Salvin-Godman Salvin-Godman	Coll.	
1.	Inst.). Cobbs Island, Virginia, June.	W. E. D. Scott,	Esq. [C.].	Princeton Univ., N.J. [E.].
1.	Cobbs Island, June.	,,	,,	e
2.	Cobbs Islaud, June.	**	,,	5
1.	Cobbs Island, June.	**	٠, ا	_
1.	Cobbs Island, 21st June.	27	,,	> <u>=</u>
1.	Cobbs Island, 21st June.	,,	,,	7
1.	Cobbs Island, 25th June.	,,	,,	7
1.	Cobbs Island, 25th June.	,.	΄, Ι	Ξ
2.	Cobbs Island, 25th June.	**	,,	Ė
	•	,,	)	Ę

## Sterna albistriata (Gray).

(Plate XIII. fig. 1.)

Sterna antarctica, Potts, Tr. N. Z. Inst. ii. p. 77 (1869); Buller, Birds New Zeal. 2nd ed. ii. p. 70 (1885).

Sterna albistriata, Saunders, Cat. Birds, xxv. p. 48 (1896); Sharpe, Hand-l. i. p. 134 (1899).

The eggs of the Black-fronted Tern are pyriform, the smaller end being somewhat sharply pointed. The ground-colour is pale green, and this is spotted and boldly blotched with dark umber-brown and pale underlying purple. Two examples measure respectively: 1.57 by 1.15; 1.58 by 1.15.

 Canterbury, New Zealand, 20th Oct. Saunders Coll. (J. R. C.).

#### Sterna virgata, Cab.

(Plate XIII. fig. 3.)

Sterna virgata, Sharpe, Phil. Trans. 168, p. 112 (1879); Saunders, t. c. p. 164 (1879); id. Zool. 'Challenger' Exped ii. pt. viii. p. 133 (1880); id. Cat. Birds B. M. xxv. p. 50 (1896); Sharpe, Hand-l. i. p. 134 (1899); Hall, Ibis, 1900, p. 11.

? Sterna, sp. inc., Sclater, Zool. 'Challenger' Exped. ii. pt. viii. p. 151 (1800).

The eggs of the Banded Tern vary greatly in shape, some being long, narrow ovals and others short, broad ovals. The ground is of an olive-buff colour, and this is spotted, streaked and blotched with dark blackish brown and pale underlying purple. Nine examples measure from 1.65 to 1.9 in length, and from 1.23 to 1.37 in breadth.

8. Kerguelen Island, Oct., Nov., Dec. Royal Society [P.]. (A. E. Eaton).

1. Heard Island, Feb.\*

Voy. II.M.S. 'Challenger.'

## Sterna vittata, Gm.

(Plate XIII. fig. 2.)

Sterna melanorhyncha, Gould, Handb. Birds Austr. ii. p. 398 (1865).
Sterna vittata, Shurpe, Phil. Trans. 168. p. 113 (1879); Saunders, Cat. Birds B. M. xxv. p. 51 (1896); Sharpe, Hand-l. i. p. 134 (1899).

The egg of the Southern Tern in the Collection is of an elongated oval form and closely resembles the eggs of S. virgata. It measures 1.8 by 1.23.

1. St. Paul's Island (J. Macgillivray). Voy. II.M.S. 'Herald.'

<sup>\*</sup> I agree with Mr. Howard Saunders (l. c.) that this is the egg of S. virgata rather than of S. vittata.

## Sterna hirundinacea, Less.

(Plate XIII. fig. 9.)

Sterna cassinii, Abbott, Ibis, 1861, p. 166.

Sterna hirundinacea, Saunders, Zool. 'Challenger' Exped. ii. pt. viii. p. 135 (1880); Sclater, t.c. p. 151 (1880); Scl. & Huds. Argent. Orn. ii. p. 196 (1889); Saunders, Cat. Birds B. M. xxv. p. 52 (1896); Sharpe, Hand-l. i. p. 134 (1899).

The eggs of Cassin's Tern vary in shape from a narrow to a broad oval, but the smaller end is always markedly pointed. The ground-colour is also very varied, being pale green, creamy buff, reddish buff or olive-buff. The markings consist of spots and blotches of blackish brown and pale inky-purple. One example in the Collection is white, with a few markings of the latter colour only. Specimens measure from 1.75 to 2 in length, and from 1.3 to 1.45 in breadth.

Rio de Janeiro, 6th June (J. Young).
 Elizabeth Island, Straits of Magel-

Saunders Coll. Voy. H.M.S. 'Challenger.'

lan, Jan.
3. Elizabeth Island, Nov.

Enzabeth Island, Nov.
 Falkland Islands (C. C. Abbott).
 Falkland Islands (C. C. A.).

Falkland Islands (C. C. A.).
 Falkland Islands (C. C. A.).

Falkland Islands (Dr. Deane).
 Falkland Islands.

Dr. Coppinger [P.]. Gould Coll.

Gould Coll. Saunders Coll.

Salvin-Godman Coll. Saunders Coll. McCormick Bequest.

## Sterna fluviatilis, Naum.

Sterna hirundo, Thien. Fortpflanz. ges. Vöy. tab. lxxxiv. fig. 1, a-m (1845-54); Baedeker, Eier Eur. Vög. tab. 7. fig. 1 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 480, pl. exxxiii. fig. iii (1856); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 295 (1884); Seebohm, Brit. Birds, iii. p. 280, pl. 46 (1885); id. Eggs of Brit. Birds, p. 102, pl. 29, figs. 1, 3 (1896).

Sterna wilsonii, Ross, Nat. Hist. Rev. 1862, p. 289; id. Canad. Nat. vii. p. 154 (1862).
Sterna fluviatilis, Dresser, Birds Eur. viii. p. 263 (1871); Legge, Birds

Ceyl. p. 1015 (1880); Saunders, Cat. Birds B. M. xxv. p. 54 (1896); Sharpe, Hand-l. i. p. 135 (1899).

The large series of eggs of the Common Tern embraces almost every type to be found amongst the eggs of the Terns. They vary in shape from broad, blunt ovals to pointed ovals and some examples are pyriform. The ground-colour varies from a pale greenish white or bluish white to different shades of buff. The markings, consisting of spots and blotches of blackish brown and underlying grey or pale purple, are distributed over the shell in an infinity of patterns. The eggs measure from 1.47 to 1.85 in length, and from 1.15 to 1.3 in breadth.

3. North America (T. M. Brewer).

North America.
 Hudson's Bay.

5. Slave Lake, Canada, June.

4. Hog Island, Virginia (Dr. Hitz:

Henshaw Coll.).

Saunders Coll.

H. F. Walter, Esq. [P.]. Gould Coll.

B. R. Ross, Esq. [P.]. Salvin-Godman Coll. STERNA. 183

STERNA. 183			
	W. E. D. Scott, Esq. [C.].	)	
2. Cobbs Island, June.	"	1	
1. Cobbs Island, June.	",	Princeton University, N.J. [E.].	
I. Cobbs Island, June.	"	10	
1. Cobbs Island, June.	27	etc	
1. Cobbs Island, June.	"	ļĔ	
I. Cobbs Island, June.	"	15	
2. Cobbs Island, 13th June.	" "	1 2.	
1. Cobbs Island, 13th June.	",	≥ 6	
2. Cobbs Island, 13th June.	",	sit	
I. Cobbs Island, 13th June.	1, ,,	<i>y</i> ;	
3. Cobbs Island, 13th June.	"	Z	
2. Cobbs Island, 13th June.	",	<u> </u>	
3. Cobbs Island, 13th June.	,, ,,		
2. Cobbs Island, 15th June.	" "		
1. Cobbs Island, 23rd June.	" "	1.	
2. Cape Charles, Virginia, 18th June.	o 1 3" o n "	J	
14. Keragh Islands, Ireland, 6th June (R. J. Ussher).	Seebohm Coll.		
8. Loch Ashie, Inverness, 3rd June (E. Hargitt).	Seebohm Coll.		
4. Nairn, June (H. Gunn: Hargitt Coll.).	Seebohm Coll.		
2. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
2. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
2. Naim, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
3. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
3. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
2. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
3. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
2. Nairn, June (H. G.: Hargitt Coll.).	Seebohm Coll.		
23. Farn Islands, June (H. Scebohm).	Seebohm Coll.		
10. Farn Islands, June (E. Hargitt).	Seebohm Coll.		
22. Farn Islands.	Seebohm Coll.		
6. Farn Islands, 12th June.	Saunders Coll.		
5. Walney Island, 5th July.	H. Durnford, Esq. [P.].		
1. Walney Island, 3rd July (P. God-man).	Salvin-Godman Coll.		
3. Cley-next-the-Sea, Norfolk, June.	L. A. Williams, Esq. [P.]		
6. Wells, Norfolk.	Dr. A. Günther [P.].		
6. Norfolk (Sayer).	Salvin-Godman Coll.		
5. Near Eastbourne, 3rd June (H. Saunders).	Saunders Coll.		
3. Penzance.	D. W. Mitchell, Esq. [P.]		
3. Holland.	Lord Lilford [P.].		
3. Island of Sylt, N. Frisian Is., June.	Saunders Coll.		
32. Missolonghi, Greece, 28th May (H. Seebohm).	Seebohm Coll.		
10. Lake Sinoe, Dobrudscha, 9th June (II. S.).	Seebohm Coll.		
Sterna macrura, Naum.			

Sterna paradisaea, Thien. Fortpflanz. ges. Vög. tab. lxxxiv. fig. 2, a-m (1845-54).

Sterna macrura, Baedeker, Eier Eur. Vög. tab. 7. fig. 2 (1855-63);
Fielden, Ibis, 1877, p. 408; id. in Nares's Narr. Voy. Polar Sea, ii.
p. 213 (1878); Saunders, Cat. Birds B. M. xxv. p. 62 (1896);
Sharpe, Hand-t. i. p. 135 (1899).

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Sterna arctica, Hewitson, Eggs of Brit. Birds, ii. p. 481, pl. cxxxiii. tigs. i, ii (1856); Seebohm, Brit. Birds, iii. p. 284, pl. 46 (1885); id. Eggs of Brit. Birds, p. 102, pl. 29. figs. 10, 12 (1896).

Sterna macroura, Ross, Nat. Hist. Rev. 1862, p. 289; id. Canad. Nat. vii.

p. 154 (1862).

Sterna hirundo, Dresser, Birds Eur. viii. p. 255 (1872).

Sterna paradisæa, Baird, Brewer & Ridyw. Water Birds N. Am. ii. p. 299 (1884); Nelson, Report Nat. Hist. Aluska, p. 58 (1887).

The eggs of the Arctic Tern are, on the whole, somewhat smaller than the eggs of the Common Tern. They do not, however, otherwise differ, and they are subject to the same variations of colour and shape. Among the specimens in the Collection are some which are of a pale bluish white, very sparingly dotted with dark brown, and one is quite unmarked. The eggs measure from 1.42 to 1.75 in length, and from 1.03 to 1.2 in breadth.

2.	North America.	Dr. Rae [P.].
3.	North America (T. M. Brewer).	Saunders Coll.
4.	North America (Smiths. Inst.).	Salvin-Godman Coll,
4.	Whalefish Island (Dr. Robertson).	Dr. Robertson [P.].
4.	Fort Yukon, Alaska (Henshaw Coll.).	Salvin-Godman Coll.
17.	Slave Lake, Canada.	B. R. Ross, Esq. [P.].
2.	Greenland.	Governor Hölboll [P.].
3.	Godhavn, Greenland (R. Müller).	Saunders Coll.
4.	Discovery Bay (C. Hart).	Voy. H.M.S. 'Discovery.'
$\tilde{2}$ .	Spitsbergen.	McCormick Bequest.
23.	Faröe Islands (H.C. Müller: Hargitt	Seebohm Coll.
20.	Coll.).	
2.	Faroe Islands, June (H. C. M.:	Seebohm Coll.
~.	Hargitt Coll.).	
7.	Faröe Islands, 18th June (H. C. M.:	Seebohm Coll.
• • •	Hargitt Coll.).	
2.	Faröe Islands, 21st June (H. C. M.:	Seebohm Coll.
• سد	Hargitt Coll,).	
2.	Faröe Islands, 21st June (H. C. M.:	Seebohm Coll.
٠.	Hargitt Coll.).	is see your Com.
2.	Faröe Islands, 21st June (H. C. M.:	Seebohm Coll,
	Hargitt Coll.).	
2.	Farce Islands, 23rd June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
2.	Faröe Islands, 23rd June (H. C. M.:	Seebolm Coll.
	Hargitt Coll.).	
2.	Faröe Islands, 23rd June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
2.	Faröe Islands, 23rd June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
2.	Faröe Islands, 23rd June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
2.	Faroe Islands, 23rd June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
6.	Faröe Islands, 24th June (H. C. M.:	Seebohm Coll.
٠.	Hargitt Coll.).	
2.	Faröe Islands, 25th June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
5.	Shetland Islands, July.	Saunders Coll.
6.	Foulney Island, 6th June	Saunders Coll.
0,	(H. Saunders).	
	(11. Nammare).	

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3. Farn Islands. Seebolim Coll. Farn Islands, June (E. Hargitt). 4. Seebohm Coll.

43. Farn Islands, June (H. Seebohm). Seebohm Coll. Carlskrone, Sweden, 26th May. Seebohm Coll.

I. Rugen, Baltic, June (T. Holland). Seebohm Coll.

Holstein, N. Germany, June (T. H.). Seebohm Coll. 3.

Pomerania (T, H.).

Seebohm Coll.

## Sterna longipennis, Nordm.

(Plate XIV. fig. 4.)

Sterna longipennis, Seebohm, Birds Japan, Emp. p. 296 (1890); La Touche, Ibis, 1892, p. 503; Saunders, Cat. Birds B. M. xxv. p. 67 (1896); Sharpe, Hand-l. i. p. 135 (1899).

Of the three eggs of Nordmann's Tern in the Collection, one is of a lengthened pointed oval form and the other two are broad ovals, but with the smaller end distinctly pointed. The ground is of a pale buff or greenish buff, and this is marked in the usual manner with blackish brown and pale purple. The specimens measure respectively: 1.6 by 1.1; 1.55 by 1.12; 1.5 by 1.12.

Yokohama, Japan (H. Pryer). Seebohm Coll.

## Sterna albigena, Licht.

(Plate XIV. fig. 5.)

Sterna senegalensis, König-Warth. Ibis, 1860, pp. 125, 432. Sterna albigena, Outes ed. Hume, Nests & Eggs Ind. B. iii. p. 311, footnote (1890); Saunders, Cat. Birds B. M. xxv. p. 69 (1896); Sharpe, Hand-l. i. p. 135 (1899).

The eggs of Lichtenstein's Tern are mostly of an oval form, with the smaller end pointed. The breadth of the egg varies a good deal in relation to the length, some examples being narrow and lengthened, and others being broad and short. The ground is typically of a warm creamy buff-colour, but sometimes it is whitish with a faint bluish tinge, and sometimes of a pale cream-colour. The markings are sparingly distributed over the shell and consist of spots and small blotches of various shades of brown, ranging from yellowish brown and chocolate-brown to blackish brown. There are also the usual pale purple underlying markings. Some specimens are nearly unmarked; others are marked with small dots only. They measure from 1.48 to 1.71 in length, and from 1.07 to 1.21 in breadth.

- 28. Island of Allah, Persian Gulf, 1st Hume Coll. June (E. A. Butler).
- 31. Island of Allah, 10th June (E.A.B.). Hume Coll. 3. Island of Allah (E. A. B.). Saunders Coll.
  - Tungistan Island, Persian Gulf, 8th Hume Coll. June (E. A. B.).
- 8. Island 16 miles south of Bushire, Hume Coll. 13th July (E. A. B.).
- Dhalak Archipelago, 1.  $\operatorname{Red}$ Sea Saunders Coll. (König-von-Warthausen).

## Sterna dougalli, Mont.

Sterna dougalli, Thien. Fortpflanz. ges. Vög. tab. lxxxv. fig. 2, a-d (1845-54); Hewitson, Eggs of Brit. Birds, ii. 479, pl. cxxxii. fig. i (1856); Dresser, Birds Eur. viii. p. 273 (1876); Legge, Birds Ceyl. p. 1033 (1880); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 303 (1884); Seebohin, Brit. Birds, iii. p. 277, pl. 46 (1885); Oates ed. Hune, Nests & Eggs Ind. B. iii. p. 301 (1890); Seebohin, Eggs of Brit. Birds, p. 101, pl. 29. figs 7, 9 (1896); Saunders, Cat. Birds B. M. xxv. p. 70 (1896); Sharpe, Hand-l. i. p. 135 (1899).

Sterna gracilis, Gould, Handb. Birds Austr. ii, p. 399 (1865).

The eggs of the Roseate Tern resemble those of the Common and Arctic Terns and pass through the same variations of shape and colour. They measure from 1.45 to 1.85 in length, and from 1.06 to 1.22 in breadth.

1 Cato Bank, North America. Saunders Coll. Massachusetts (T. M. Brewer). Salvin-Godman Coll. 3. Muskegett Island. Massachusetts. Saunders Coll. Goose Island, Connecticut, 18th June Salvin-Godman Coll. (O. N. Brooke: Henshaw Coll.).

3. Florida Cays. 3. Glashedy, Ireland, May.

Wideopens, Farn Islands. 23rd June (O. Salvin).

Farn Islands (F. Bond).

Coast of Wales, June.

Cornwall.

3. Andaman Islands, June (R. J. Wimberley).

2. Bird Island, Australia (J. Macgillivray).

Cape York, Australia.

7. New Caledonia, 1st Jan.

New Caledonia (J. Macgillivray).

Saunders Coll. Saunders Coll. Salvin-Godman Coll.

Saunders Coll. J. T. Proud, Esq. [P.]. D. W. Mitchell, Esq. [P.]. Saunders Coll.

Gould Coll.

Gould Coll. Saunders Coll. Salvin-Godman Coll.

## Sterna cantiaca, Gm.

Sterna cantiaca, Thien. Fortpflanz. ges. Vög. tab. lxxxiii. fig. 3, a-h (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 478, pl. cxxxii. figs. ii, iii (1856); Dresser, Birds Eur. viii. p. 301 (1877); Seebohm, Brit. Birds, iii. p. 272, pl. 48 (1885); id. Eggs of Brit. Birds, p. 100, pl. 30. figs. 1-3 (1896); Saunders, Cat. Birds B. M. xxv. p. 75 (1896); Sharpe, Hand-l. i. p. 135 (1899).

Thalasseus cantiacus, Baedeker, Eier Eur. Vog. tab. 24. fig. 2 (1855-63).

Thalasseus acuflavidus, Salvin. Ibis, 1864, p. 386.

Sterna sandvicensis acuflavida, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 288 (1884).

The eggs of the Sandwich Tern vary from a pointed oval form to pyriform. The ground ranges from white, through cream-colour and pale buff, to brownish buff. The markings are very bold as a rule and consist of spots and blotches of dark brown approaching black, and underlying inky-purple. The size, shape, and distribution of the markings of both kinds present almost endless variations.

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Some examples are delicately marked with only small spots; others are marked with huge confluent blotches measuring quite an inch across, and between these two types every combination occurs. They measure from 1.9 to 2.15 in length, and from 1.3 to 1.55 in breadth.

Findhorn, N.B., 22nd June, J. M. Chadwick, Esq. [P.]. 7. Farn Islands (Hargitt Coll.). Seebohm Coll. Farn Islands, June (Hargitt Coll.). Seebohm Coll. Seebolim Coll. 4. Farn Islands, 4th June (Hargitt Coll.). 1. Farn Islands, 10th June. Saunders Coll. Farn Islands, 12th June. Saunders Coll. 18. Farn Islands, 3rd June (H. Seebohm Coll. Seebohm).

Farn Islands, 18th June (H. S.). 50. 4 Farn Islands, 19th June (H. S.).

22.Salvin-Godman Coll. Knox Island, Farn Islands, 18th June (O. Salvin).

Ravenglass, Cumberland, 29th May. 3, Penzance.

1. Rottum, Holland (H. E. Dresser: Hargitt Coll.).

2. Dutch Coast, June (T. Holland). 11. Island of Sylt, N. Frisian Is. (Baker). Lake Sinoe, Dobrudscha, 9th May. 6.

1. North America (Smiths. Inst.). Florida (Henshaw Coll.).

Northern Two Cays, Brit. Honduras (O. Salvin).

Seebohm Coll. Seebohm Coll.

Saunders Coll. D. W. Mitchell, Esq. [P.]. Seebohm Coll.

Seebohm Coll. Saunders Coll.

Seebohm Coll. Salvin-Godman Coll. Salvin-Godman Coll. Salvin-Godman Coll.

## Sterna maxima, Bodd.

(Plate XIV. fig. 7.)

Sterna maxima, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 284 (1884); Saunders, Cat. Birds B. M. xxv. p. 80 (1896); Dresser, Birds Eur. ix. (Suppl.) p. 383 (1896); Sharpe, Hand-l. i. p. 135 (1899).

The eggs of the Great Tern are of a broad, pointed eval form. The ground varies from cream-colour to pale buff and is often tinged with pink. The surface-markings consist of spots and small blotches of deep chocolate or blackish brown, and these are almost invariably blurred and smudged at the margin. The underlying markings are of a pale purple colour and are also blurred and ill-The markings of both kinds are equally, and not very thickly, distributed over the whole shell. The eggs measure from 2.45 to 2.55 in length, and from 1.65 to 1.8 in breadth.

North America (Henshaw Coll.). Salvin-Godman Coll. North America (Smiths, Inst.). Salvin-Godman Coll. 1. Cape Charles, Virginia, 18th June Princeton Univ., N.J. [E.]. (W. E. D. Scott).

Cobbs Island, Virginia, 2nd July 6. Saunders Coll. (W. Brewster). 2.

Florida, June (C. J. Maynard). Saunders Coll. 188 LARIDÆ.

2. Florida.

1. [Florida.]

 San Pedro Cays, Jamaica (H. E. Dresser). Prof. Owen [P.]. Princeton Univ., N.J. [E.]. Saunders Coll.

#### Sterna media, Horsf.

Sterna arabica, Thien. Fortpflanz. ges. Vög. tab. lxxxiii. fig. 4 (1845–54). Thalasseus affinis, Baedeker, Eier Ew. Vög. tab. 79. fig. 3 (1855–63). Sterna affinis, König-Warth. Ibis, 1860, p. 127, pl. v. fig. 1; Bree, Birds

Eur. iv. p. 87, pl. — (1867).
Sterna media, Dresser, Birds Eur. viii. p. 285 (1878); Legge, Birds Ceyl.
p. 1030 (1880); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 299, footnote (1890); Barnes, Jour. Bomb. Nat. Hist. Soc. vi. p. 299, pl. — fig. 990 (1891); Saunders, Cat. Birds B. M. xxv. p. 86 (1896); Sharpe, Hand-l. i. p. 135 (1899).

The eggs of the Allied Tern are of a pointed oval form. The ground ranges from white, with a faint tinge of cream-colour, to pink and pinkish buff. The surface-markings consist of specks, spots and small blotches of blackish brown or black, and many of them are blurred and tinged with rufous at the margin. On some examples the markings consist entirely of small spots, in others small blotches are intermingled with the spots. In a small number the markings are very spare and consist of minute dots; and two or three specimens in the large series in the Collection are absolutely unmarked. The underlying markings consist of small clouds and blotches of very pale inky-purple. The eggs measure from 1.9 to 2.35 in length, and from 1.38 to 1.5 in breadth.

389. Island near the Island of Arabé, Hume Coll. Persian Gulf, 19th July (E. A. Butler).

#### Sterna bergii, Licht.

Sterna poliocerca, Thien. Fortpflanz. ges. Vög. tab. lxxxiii. fig. 2 (1845–54).
Thalasseus pelecanoides, Macyill. Voy. 'Ruttlesnake,' ii. p. 358 (1852).
Thalasseus velox, Baedeker, Eier Eur. Vög. tab. 79. fig. 4 (1855–63).
Sterna velox, König-Warth. Ibis. 1800, p. 127, pl. v. figs. 2, 3.
Thalasseus poliocercus, Gould, Handb. Birds Austr. ii. p. 396 (1865).
Sterna bergii, Legge, Birds Ceyl. p. 1026 (1880); North, Nests & Eggs
Austr. Birds, p. 354, pl. xix. fig. 2 (1889); Outes ed. Hume, Nest &
Even Let P. iii. 2017 (1800).

Austr. Birds, p. 354, pl. xix. fig. 2 (1889); Oates ed. Hume, Nests & Eggs Ind. B. iii, p. 297 (1890); Barnes, Jour. Bomb. Nat. Hist. Soc. vi. p. 298, pl. —. fig. 989 (1891); Saunders, Cat. Birds B. M. xxv. p. 89 (1896); Sharpe, Hand-l. i. p. 136 (1899).

The eggs of the Large Crested Tern are the most varied and the most beautiful of all the eggs of the Terns, and it is impossible to give an adequate description of them. In shape they are broad ovals, strongly pointed at the small end. The ground is most usually cream-colour, but many eggs have the ground buff, ochraceous, reddish cream-colour, reddish buff, pale yellow, pale green, pale blue and salmon-pink, both pale and rich. The underlying markings are of a pale purple and are usually small and inconspicuous, but sometimes they consist of huge blotches, covering a considerable portion of the shell. The surface-markings are of a dark umber-brown or blackish brown, and many of them are

Earl of Derby [P.].

blurred at the margin, where they turn to reddish brown. They are of every possible size and shape, varying from speeks to large blotches, smears and clouds. A characteristic of the eggs of this Tern are the hieroglyphic-like lines and serawls which are found on a majority of the specimens. As in the case of the eggs of other Terns, some are very sparingly marked and a few are quite unmarked. They measure from 2.3 to 2.71 in length, and from 1.6 to 1.8 in breadth.

 Suakin Reefs, Red Sea, June to Capt. A. Carpenter [P.]. Aug.

19. Astola Island, Gulf of Oman, June Hume Coll. (Capt. Wise).

121. Astola Island [June] (Capt. Wise). Hume Coll.

15. Astola Island (E. A. Butler). Saunders Coll. 72. Astola Island, 27th May (E. A. B.). Hume Coll.

72. Astola Island, 27th May (E. A. B.). Hume Coll. 183. Astola Island (E. A. B.). Hume Coll.

 Bramble Cay, Australia (J. Mac-Voy. H.M.S. 'Rattlesnake.' gillivray).

5. Torres Straits, Dec. (J. Mac- Gould Coll. gillivray).

2. N.W. Australia.

Lizard Island, 12th May. Gould Coll.
 Port Essington. Gould Coll.

1. Port Essington. Gould Coll.
2. Australia. Gould Coll.

4. New Caledonia (J. Macgillivray). Salvin-Godman Coll.

# Sterna frontalis, Gray.

(Plate XIV. fig. 6.)

Sterna melanorhyncha, Gould, Handb. Birds Austr. ii. p. 398 (1865): Campbell, Nests & Eggs Austr. Birds, p. 66 (1883).

Sterna frontalis. Buller, Birds New Zeal. 2nd ed. ii. p. 68 (1888); North, Nests & Eggs Austr. Birds, p. 403 (1889); Saunders, Cat. Birds B. M. xxv. p. 97 (1896); Sharpe, Hand-l. i. p. 136 (1899).

The eggs of the White-fronted Tern in the Collection are of a regular oval form and of an olive-buff colour of different shades, speckled and blotched with dark umber-brown and underlying pale purple. The markings are small and distinct and are equally spread over the whole shell. Five specimens measure respectively: 1·8 by 1·27; 1·87 by 1·3; 2 by 1·44; 1·73 by 1·25; 1·76 by 1·26.

3. New Zealand. Dr. Lvall [P.].

 Bird and Piper's Islands\*, N.E. Voy. H.M.S. Rattlesnake.' Australia (J. Macgillivray).

# Sterna aleutica, Baird.

(Plate XIV. fig. 9.)

Sterna aleutica, Baird, Brewer & Ridgw, Water Birds N. Am. ii. p. 307 (1884); Nelson, Report Nat. Hist. Alaska, p. 59 (1887); Saunders, Cat. Birds B. M. xxv. p. 98 (1896); Sharpe, Hand-l. i. p. 136 (1899).

<sup>\*</sup> This species is not included in the list of birds given by Macgillivray in the Narrative of the Voyage of H.M.S. 'Rattlesnake.'

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The eggs of the Aleutian Tern are of au oval form, somewhat pointed at the small end. The ground-colour is olive-buff, and this is marked with spots and blotches of dark chocolate or blackish brown. On two examples, the blotches are more or less confluent over the whole shell; on a third, the blotches are smaller in size and chiefly confined to a broad irregular band round the larger end. The underlying markings are inconspicuous and of a pale purple colour. Three specimens measure respectively: 1.6 by 1.1; 1.57 by 1.17; 1.67 by 1.15.

1. Alaska (Smiths. Inst.). Saunders Coll.

2. Stewart Island, June (Henshaw Coll.). Salvin-Godman Coll.

# Sterna lunata, Peale.

(Plate XIV. fig. 8.)

Sterna lunata, Lister, P. Z. S. 1891, p. 296; Saunders, Cat. Birds B. M. xxv. p. 100 (1896); Sharpe, Hand-l. i. p. 136 (1899).

The eggs of the Lunated Tern are of a broad, blunt oval form. The ground is of a creamy-white colour, very faintly tinged with pink, and this is pretty closely marked with well-defined small spots and blotches of reddish brown. The underlying markings, which are of a pale purple colour, are numerous and sometimes consist of large smears, but usually they are small. Four examples measure respectively: 1.53 by 1.17; 1.62 by 1.26; 1.7 by 1.22; 1.62 by 1.2.

4. Phœnix Island, Pacific Ocean (J. J. Lister).

J. J. Lister, Esq. [P.].

# Sterna anæstheta, Scop.

Onychoprion panaya, Maegillivray, Voy. 'Rattlesnake,' ii. p. 359 (1852). Haliplana panaya, Salvin, Ibis, 1864, p. 381.

Onychoprion panavensis, Gould, Handb. Birds Austr. ii. p. 411 (1865). Sterna panaya, Finsch & Hartl. Fauna Centralpolyn. p. 228, taf. iv.

figs. 1-3 (1867).
Sterna amestheta, Legge, Birds Ceyl. p. 1040 (1880); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 316 (1884); Milne-Edwards & Grandidier, Hist. Nat. Madag, Ois. ii. p. 658, pl. 308, fig. 6 (1885); North, Nests & Eggs Austr. Birds, p. 356 (1889); Oates ed. Hume,

Nests & Eggs Ind. B. iii. p. 300 (1890); Saunders, Cat. Birds B. M. xxv. p. 101 (1896); Seebohm, Eggs of Brit. Birds, p. 105, pl. 31. fig. 6 (1896); Sharpe, Hand-l. i. p. 136 (1899).

The eggs of the Panayan Tern are usually of a blunt oval form, but some are rather pointed at the smaller end. The ground varies from cream-colour to rich pinkish buff, and this is marked with specks, spots and blotches of rich reddish brown. These markings are not very thickly distributed over the shell, nor are they of very large size, but they are distinct and sharply defined, and it is seldom that two or more markings are confluent. The underlying markings are of a pale purple colour and are seldom very

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eenspicuous. The eggs measure from 1.6 to 1.88 in length, and from 1.15 to 1.3 in breadth.

Saddle Cay, Brit. Honduras, 10th Salvin-Godman Coll. May (O. Salvin).

Curlew Cay, Brit. Honduras, 14th 15. Salvin-Godman Coll. May (O. S.).

Island 16 miles south of Bushire, Hume Coll. Persian Gulf, 13th July (E. A. Butler).

Island of Allah, Persian Gulf, 1st 36. Hume Coll. June  $(E, A, B_{\cdot})$ .

2. Island of Allah, 29th May (E. A. Hume Coll.

1. Tungistan Island, Persian Gulf, 8th Hume Coll. June (E. A. B.).

North Australia (J. Macgillivray). 2.

Vov. II.M.S. 'Rattlesnake.' Montalivet Island, N.W. Australia, P. W. Bassett Smith, Esq. 7th July. [P.]

Dirk Hartog Island, West Australia. 1.

3. Australia. 3. Polynesia. Gould Coll.

Earl of Derby [P.]. Saunders Coll.

## Sterna fuliginosa, Gm.

Sterna fuliginosa, Thien. Fortpflanz. ges. Vög. tab. lxxxii. fig. 5 (1845-54); Dresser, Birds Eur. viii. p. 307 (1877); Legge, Birds Ceyl. p. 1036 (1880); Saunders, Zool. 'Challenger' Exped. ii. pt. viii. p. 136 (1880); Sclater, t. c. p. 151 (1880); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 312 (1884); Milne-Edwards & Grandidier. Hist. Nat. Madag., Ois. ii. p. 600, pl. 308. figs. 7, 7 a (1885); Seebohm, Brit. Birds, iii. p. 292, pl. 48 (1885); MacFarlane, Ibis, 1887, p. 213; North, Nests & Eggs Austr. Birds, p. 357, pl. xxi. fig. 1 (1889); Oates ed. Hume, Nests & Eggs Ind. B. iii, p. 303 (1890); Lister, P. Z. S. 1891, p. 296; Seebohm, Eggs of Brit. Birds, p. 104, pl. 30. figs. 4-6 (1896); Saunders, Cat. Birds B. M. xxv. p. 106 (1896); Sharpe, Hand-l. i. p. 136 (1899).

Haliplana fuliginosa, Baedeker, Eier Eur. Vög. tab. 32. fig. 5 (1855–63). Onychoprion fuliginosa, Gould, Handb. Birds Austr. ii. p. 408 (1865).

The eggs of the Soety Tern are of much the same type as those of the Panavan Tern, but are somewhat larger; the surface-markings are coarser and of a brighter reddish brown, and they frequently blend together at the broad end, to form an irregular cap or zone; the ground is more persistently of a cream-colour, and comparatively few eggs are tinged with pink; the underlying markings are generally large and show up well. Specimens measure from 1.85 to 2.2 in length, and from 1.25 to 1.5 in breadth.

North America (Henshaw Coll.).

Tortugas, Florida (S. L. Greenwood: Salvin-Godman Coll. Henshaw Coll.).

Florida Cays (H. E. Dresser).

4. Florida (Holbert: Henshaw Coll.).

1. Ruatan Is., Honduras.

Pedro Cay, Jamaica (E. C. Taylor). Salvin-Godman Coll.

Salvin-Godman Coll.

Saunders Coll. Salvin-Godman Coll. Salvin-Godman Coll,

Tortola Island, W. Indies (E. C. Salvin-Godman Coll. Taylor).

99 Ascension Island.

Ascension Island (Dr. Gill).

Ascension Island, 30th April (Dr. Purchas).

Ascension Island (Lt. M. Squire, H.M.S. 'Flora').

Ascension Island.

6. Ascension Island (Capt. Sperling, R.N.).

Ascension Island (Rev. H. Hawkins: 3 Hargitt Coll.).

2. Ascension Island.

28.Cherbaniani Reef, Laccadive Islands, 12th Feb. (A. O. Hume).

Round Island, Mauritius.

8. Australia.

Raine Island, Barrier Reef, I5. Australia.

17. Lord Howe Island (E. Saunders).

11. Howland Island, Gilbert Group, Pacific Ocean. Phœnix Island, Pacific Ocean. 29th

June. 4. Christmas Island. Pacific Ocean. Oct. (J. R. H. MacFarlane, R.N.).

Surgeon Comry, R.N. P.J.

Saunders Coll.

Saunders Coll.

Saunders Coll.

Vov. H.M.S. 'Challenger.' Salvin-Godman Coll.

Seebohm Coll.

F. A. Barratt, Esq. [P.]. Hume Coll.

E. L. Layard, Esq. [P.].

Gould Coll. Voy. H.M.S. 'Challenger.'

Seebohm Coll.

Seebohm Coll.

J. J. Lister, Esq. [P.]. Saunders Coll.

# Sterna nereis (Gould).

(Plate XIV. fig. 1.)

Sternula nereis, Gould, Hundb, Birds Austr, ii. p. 402 (1865); Campbell. Nests & Eggs Austr. Birds, p. 67 (1883); North, Nests & Eggs Austr. Birds, pp. 358, 404 (1889).

Sterna nereis, Buller, Birds New Zeal. 2nd ed. ii. p. 75 (1888); Saunders, Cat. Birds B. M. xxv. p. 112 (1896); Sharpe, Hand-l. i. p. 136 (1899).

The eggs of the Fairy Tern are of a broad oval form, rather pointed at the small end. The ground varies from cream-colour to light buff, and this is marked all over with spots and small blotches of yellowish brown in some specimens, blackish brown in others. These markings are well-defined. The underlying clouds and spots are of a pale purple colour. Seven examples measure from 1.25 to 1.42 in length, and from 1 to 1.03 in breadth.

New Caledonia. West Australia.

Saunders Coll. Gould Coll.

# Sterna sinensis (Gm.).

Sterna sinensis, Legge, Birds Ceyl. p. 1019 (1880); Parker, Stray Feathers, ix. p. 490 (1881); Oates ed. Hume, Nests & Eggs Ind. E. iii. p. 312, part, (1890); Saunders, Cat. Birds B. M. xxv. p. 113 (1896); Sharpe, Hand-t. i. p. 136 (1899).

Sternula sinensis, North, Nests & Eggs Austr. Birds, p. 405 (1889); Seebohm, Birds Japan. Emp. p. 298 (1890).

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The eggs of the White-shafted Little Tern do not differ in any respect from those of S. minuta described below.

S.E. Ceylon, 30th June. 4. Yokohama (H. Pryer).

Saunders Coll. Seebohm Coll.

# Sterna minuta, Linn.

Sterna minuta, Thien. Fortpflanz. ges. Vög. tab. lxxxv. fig. 3 a-f (1845-54); Baedeker, Eier Eur. Vög. tab. 7. fig. 3 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 484, pl. exxxiv. fig. i (1856); Dresser, Birds Eur. viii. p. 279 (1876); Seebohm, Brit. Birds, iii. p. 280, pl. 46 (1885); id. Eggs of Brit. Birds, p. 103, pl. 29. figs. 2, 5 (1896); Saunders, Cat. Birds B. M. xxv. p. 116 (1896); Sharpe, Hand-l. i. p. 136 (1899).

Sternula minuta, Saunders, Ibis, 1871, p. 399.

Sterna sinensis, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 312, part. (1890).

The eggs of the Little Tern are of an oval shape, but decidedly pointed at the small end. The ground varies from very pale creamcolour to drab or buff, and this is rather thickly marked with spots and blotches of different shades of dark brown. The markings are generally bold, and some of the blotches are of large size. The underlying markings are of a pale inky-purple and are usually well developed. The dimensions vary from 1.15 to 1.3 in length, and from  $\cdot \$5$  to 1.05 in breadth.

- 3. England.
- Farn Islands, 29th May.
- Walney Island, Lancashire, 3rd July (P. Godman).
- Walney Island, 4th June (H. Saunders).
- The Warren, Carnaryon, 20th & 22nd May (F. Nicholson: Hargitt Coll.).
- Near Lydd, Kent, 25th May.
- 4.
- Dungeness, Kent, 10th June. Island of Sylt, N. Frisian Is., June. 4.
- Island of Sylt (Baker). 3.
- Island of Sylt, 2nd June. Jutland, 30th May (Ellingren). 2.
- 3. R. Guadalquivir, Spain.
- 1. South Spain.
- 172. Missolonghi, Greece, 31st May (H. Seebohm).
  - 3. India.
  - 50. Eastern Narra, Sind (Scrope Doig).
  - Wazirabad, India, 28th April.
  - Delhi, 14th May (C. T. Bingham). 3.
  - Etawah, 6th April. 11.
  - Mirzapur, 25th March. 3.
    - River Niger, W. Africa. 2.

Montagu Coll.

W. Thorburn, Esq. [P.].

Salvin-Godman Coll.

Saunders Coll.

Seebohm Coll.

Saunders Coll.

Col. W. Verner [P.].

Seebohm Coll.

Saunders Coll.

H. Durnford, Esq. [P.]. Seebohm Coll.

Lord Lilford [P.].

Saunders Coll.

Seebohm Coll.

Hume Coll.

Hume Coll.

Hume Coll.

Hume Coll.

Hume Coll.

Hume Coli,

Dr. Cuthbert Christy [P.].

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#### Sterna saundersi, Hume.

(Plate XIV. fig. 2.)

Sterna saundersi, Legge, Birds Ceylon, p. 1023 (1880); Saunders, Cat. Birds B. M. xxv. p. 120 (1896); Sharpe, Hand-l. i. p. 136 (1899).
 Sterna sinensis, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 312, part. (1890).

The eggs of the Black-shafted Little Tern are of a broad oval form, with the small end very slightly compressed. All the specimens in the Collection are very uniform in coloration, and although they can be matched by some of those of S. minuta, they are, as a rule, very recognizable. The ground is of a creamy-buff colour. The markings are very small, consisting of dots, streaks and lines, and there is seldom a mark which can be termed a blotch. Moreover, the markings are rather sparingly spread over the shell, and present a very delicate appearance. The surface-markings are yellowish brown, with occasionally a darker or blackish-brown spot, and the underlying ones are of a pale grey colour. In size the eggs do not differ from those of S. minuta.

2. Suakin Reefs, Red Sea.

Capt. A. Carpenter [P.].

16. Karachi, May (E. A. Butler). Hume Coll.

# Sterna antillarum (Less.).

(Plate XIV. fig. 3.)

Sterna antillarum, Salvin, Ibis, 1864, p. 384; Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 309 (1884); Saunders, Cat. Birds B. M. xxv. p. 122 (1896); Sharpe, Hand-l. i. p. 137 (1899).

The eggs of the Least Tern are not separable from those of S. minuta. They vary from 1·15 to 1·3 in length, and from ·81 to ·95 in breadth.

3.	North America.	Saunders Coll.		
2.	North America (T. M. Brewer).	Saunders Coll.		
1.	North America (T. M. Brewer).	Salvin-Godman Coll.		
1.	North America.	A. D. Bartlett, Esq. [P.].		
5.	Hog Island, Virginia, 5th June	Salvin-Godman Coll.		
	(R. B. Hitz: Henshaw Coll.).			
2.	Cobbs Island, Virginia, June.	W. E. D. Scott, Esq. [C	J. 7 5	
1.	Cobbs Island, June.	"	Princeton University, N.J.[E.]	
1.	Cobbs Island, June.	** **	1 6	
1.	Cobbs Island, June.	,, ,,	1 2	
$^2$ .	Cobbs Island, June.	22 21	12	
2.	Cobbs Island, 5th June.	11 21	E.	
1.	Cobbs Island, 5th June.	22 22	\ve	
2.	Cobbs Island, 5th June.	12 22	1 E.	
2.	Cobbs Island, 5th June.	" "	5	
2.	Cobbs Island, 17th June.	"	ĺz	
2.	Cobbs Island, 27th May.	"	-	
$\overline{2}$ .	Cobbs Island, 27th May.	"		
2.	Cobbs Island, 27th May.	"		
~.	Condo Limitary In samp	<i>''</i>	J	

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2. 2. 31.	Cobbs Island, 27th May. Cobbs Island, 27th May. Baragat Beach, New Jersey, June.	W. E. D. Scot	tt, Esq. [C.].	Princeton University, N.J. [E.]
4.	Eastern N. American Coast			G
	(C. Pennoek).			불.
2.	Sarasota Bay, Florida, 29th	W. E. D. Scot	tt, Esq. [C.].	≻ <u>fe</u>
	May.			1 <u>É</u> .
2.	Sarasota Bay, 29th May.	"	"	13
3.	Sarasota Bay, 29th May.	,,	"	2
2.	Sarasota Bay, 29th May.	,,	"	1 5-
2.	Sarasota Bay, 29th May.	"	,,	1 🖼
2.	Sarasota Bay, 29th May.	,,	,,	ائن (
25.	Grassy Cay, Brit. Honduras,	Salvin-Godma	n Coll.	•
	19th May (O. Salvin).			

## Sterna superciliaris, Vieill.

(Plate XV. fig. 1.)

Sterna superciliaris, Scl. & Salv. P. Z. S. 1866, p. 200; Scl. & Huds. Argent. Orn. ii. p. 197 (1888); Saunders, Cat. Birds B. M. xxv. p. 124 (1896); Sharpe, Hand-l. i. p. 137 (1899).

The eggs of the Eyebrowed Tern are similar to many of those of *S. minuta*, the ground-colour being of a warm buff and the markings rather small and delicate. In fact, the markings are intermediate in size between those on the eggs of *S. minuta* and those of *S. saundersi*. Eight specimens vary from 1·17 to 1·23 in length, and from ·91 to ·95 in breadth.

- Huallaga River, E. Peru, 21st July Saunders Coll. (E. Bartlett).
- 2. Upper Amazons (E. Bartlett). Seebohm Coll.

# Sterna melanauchen, Temm.

(Plate XV. fig. 3.)

Sterna melanauchen, Thien. Fortpflanz. ges. Vög. tab. lxxxii. fig. 2 (1845-54); Macgillivray, Voy. 'Rattlesnake,' ii. p. 358 (1852); Gould, Handb. Birds Austr. ii. p. 400 (1865); Campbell, Nests & Egys Austr. Birds, p. 67, pl. —. fig. 606 (1883); North, Nests & Egys Austr. Birds, p. 356 (1889); Oates ed. Hume, Nests & Eygs Ind. B. iii. p. 302 (1890); Suanders, Cat. Birds B. M. xxv. p. 126 (1896); Sharpe, Hand-l. i. p. 137 (1899).

The eggs of the Black-naped Tern are of an oval form, but somewhat sharply pointed at the smaller end. The ground-colour varies, being white, creamy white, pale buff or pinkish buff, and this is usually boldly marked with spots and blotches which vary in colour from yellowish brown to chocolate-brown, and are generally more frequent at the larger end than elsewhere. The underlying markings of pale purple are of large size and well-defined. Sometimes an example may be found which is marked with only a few dots. The eggs measure from 1.4 to 1.65 in length, and from 1.05 to 1.2 in breadth.

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2.

Mauritius. Sir E. Belcher [P.].

3. South Andamans, June (R. J. Saunders Coll. Wimberley).

28. Nicobar Islands (R. J. Wimberley). Hume Coll.

 Bird and Piper's Islands, N.E. Voy. H.M.S. 'Rattlesnake.' Australia (J. Maegillivray).

2. Piper's Island, 26th Sept. (J. Gould Coll. Macaillivray).

# Sterna trudeaui, Audub.

## (Plate XV. fig. 7.)

Sterna trudeauii, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 290 (1884); Holland, Ibis, 1890, p. 428; 1892, p. 212; Saunders, P. Z. S. 1891, p. 373; id. Cat. Birds B. M. xxv. p. 130 (1896).
Sterna trudeaui, Sharpe, Hand-l. i. p. 137 (1899).

Of the three eggs of Trudeau's Tern in the Collection, two are of a long, narrow, oval form, and one is a broad, but pointed, oval. The ground-colour is olive-buff, and the surface-markings are of a chocolate or blackish-brown. In one example they consist chiefly of large smears and blotches; in the other two, of spots and small blotches, distinct and well defined. At the larger end there are a few scrolls and twisted lines. The underlying markings are of a pale purple colour. The three specimens measure respectively: 1.63 by 1.2; 1.82 by 1.17; 1.75 by 1.23.

3. Argentine Republic, Nov.

A. H. Holland, Esq. [C.].

# Genus PROCELSTERNA, Lafresn.

# Procelsterna cærulea (F. D. Bennett).

(Plate XV. fig. 2.)

Anous cinerea, apud Finsch & Hartl. Fauna Central-polyn. p. 239, pl. iv. figs. 4, 5 (1867).

Anous caruleus, MacFarlane, Ibis, 1887, p. 213; Lister, P. Z. S. 1891, pp. 296, 300.

Procelsterná cærulea, Saunders, Cat. Birds B. M. xxv. p. 133 (1896): Sharpe, Hand-l. i. p. 137 (1899).

The eggs of the Blue Noddy are represented in the Collection by only three specimens. Of these, two are quite similar to the eggs of *P. cinerea* described below, but are smaller. The third is of a pinkish-buff colour marked with a very few scattered reddish-brown spots, except at the apex of the broad end, where the spots are thickly disposed and are intermingled with some hieroglyphic-like lines. The three eggs measure respectively: 1·4 by 1·07; 1·5 by 1·03; 1·48 by 1·03.

 Christmas Island, Pacific Ocean, Saunders Coll. 7th Oct. (J. R. H. MacFarlane, R.N.).

2. Canton Island, Phœnix Group, J. J. Lister, Esq. [P.]. Pacific Ocean, July.

## Procelsterna cinerea (Gould).

Procelsterna albivitta, Gould, Handb. Birds Austr. ii. p. 420 (1865); Campbell, Nests & Eggs Austr. Birds, p. 68 (1883).

Anous cinereus, Crowfoot, Ibis, 1885, p. 265; North, Nests & Eggs Austr. Birds, p. 376, pl. xxi. fig. 6 (1889).

Procelsterna cinerea, Saunders, Cat. Birds B. M. xxv. p. 135 (1896); Sharpe, Hand-l. i. p. 137 (1899).

The eggs of the Grey Noddy are of a broad oval or elliptical form. The ground is of a pinkish-cream colour, and this is very sparingly marked all over with speeks, spots, and lines of yellowish brown and reddish brown. The underlying markings are of a pale purple colour and are very inconspicuous. In a few specimens the markings are rather thickly disposed over the larger end. Eleven examples vary from 1.62 to 1.72 in length, and from 1.15 to 1.3 in breadth.

Norfolk Island (Wilson).

Norfolk Island.

6. Norfolk Island. 2. Lord Howe Island, Sept. (J. Macaillivrau).

Gould Coll.

E. Saunders [C.]. Dr. W. M. Crowfoot [P.].

Vov. H.M.S. 'Herald.'

## Genus ANOUS, Steph.

# Anous stolidus (Linn.).

Sterna stolida, Thien. Fortpflanz, ges. Vög. tab. lxxxii. fig. 4 (1845–54);
 Seebohm, Eggs of Brit. Birds, p. 105, pl. 31. figs. 4, 5 (1896).
 Anous stolidus, Baedeker, Eier Eur. Vög. tab. 32. fig. 4 (1855–63);

Gould, Handb. Birds Austr. ii. p. 413 (1865); Saunders, Zool. 'Challenger' Exped. ii. pt. viii. p. 137 (1880); Scl. t. c. p. 151 (1880); Legge, Birds Ceylon, p. 1043 (1880); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 325 (1884); Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 663, pl. 308. fig. 4 (1885); MacFarlane, Ibis, 1887, p. 210; North, Nests & Eggs Austr. Birds, pp. 358, 375,
 pl. xxi. fig. 2 (1889); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 315 (1890); Saunders, Cat. Birds B. M. xxv. p. 136 (1896); Sharpe, Hand-l. i. p. 137 (1899).

The Noddy, Salvin, Ibis, 1864, p. 383.

The eggs of the Noddy are of a regular oval form. The ground varies from white to a pinkish stone-colour and is marked with various shades of reddish brown. The markings consist of spots and blotches and are often blurred at the margins. In some eases, these are sparingly scattered over the whole shell; in others they are more frequent at the larger end than elsewhere, where they form a cap or zone. Occasionally an example is boldly blotched all over, and sometimes the markings are almost entirely absent. The underlying markings are of a pale purple colour. The eggs measure from 1.9 to 2.3 in length, and from 1.3 to 1.55 in breadth.

America (Smiths. Inst.).

2. America (Henshaw Coll.). Tortugas, Florida (T. J. Greenwood). 3.

8. Coast of British Honduras.

Southern Water Cay, Brit. Honduras Salvin-Godman Coll. (O. Salvin).

Salvin-Godman Coll. Salvin-Godman Coll.

U.S. Nat. Museum [P.]. Salvin-Godman Coll.

South-west-of-all Cay, Brit. Honduras. 112th May (O. S.).

Glover's Reef, Brit. Honduras (O. S.). Ascension Island (Dr. Gill). 5.

Mauritius. 4.

2. Round Island, Mauritius.

Ι. Sandy Island (E. L. Layard). 6. Rodriguez Island (H. H. Slater).

5. Australia.

9. Raine Island, Barrier Reef, Australia.

Howick Islands, N.E. Australia (J. Macgillivray).

3. Lord Howe Island.

Ellice Islands. 2.

•) Sala v Gomez Island, Pacific Ocean (J. R. H. MacFarlane).

Ninafou or Hope Island, Navigator Saunders Coll. 2. Group.

Salvin-Godman Coll.

Saunders Coll.

Saunders Coll. Sir E. Belcher [P.]. E. L. Layard, Esq. [P.].

Salvin-Godman Coll. Transit of Venus Exped.

Gould Coll. Vov. H.M.S. 'Challenger.'

Gould Coll. Saunders Coll.

Rev. S. J. Whitmee [C.].

Saunders Coll.

# Anous ridgwayi, Anthony.

(Plate XV, fig. 6.)

Anous stolidus ridgwayi, Anthony, Auk, 1898, p. 36; Sharpe, Hand-l. i. p. 137 (1899).

The three eggs of Ridgway's Noddy contained in the Collection are remarkable for their very feeble coloration. The ground is white or of a very pale cream-colour. At the larger end of each egg there is a cluster of spots and small blotches of rusty brown, but elsewhere the surface-markings are almost absent, consisting of only a few small spots widely scattered. The underlying markings of very pale purple are more evenly distributed over the whole shell. The three examples measure respectively: 2.04 by 1.43; 2·1 by 1·45; 2·1 by 1·44.

3. Socorro Island, 12th May.

A. W. Anthony, Esq. [P.].

# Anous galapagensis, Sharpe.

(Plate XV, fig. 5.)

Anous galapagensis, Saunders, Cat. Birds B. M. xxv. p. 143 (1896); Sharpe, Hand-l. i. p. 137 (1899).

Anous stolidus galapagensis, Rothsch. & Hartert, Nov. Zool. vi. p. 191 (1899).

The eggs of the Galapagos Noddy are smaller than the majority of those of A. stolidus, but do not otherwise differ. The six specimens contained in the Collection can be easily matched by eggs of that species. They measure from 1.85 to 2.01 in length, and from 1.3 to 1.35 in breadth.

 Culpepper Island, Galapagos, 27th Webster-Harris Exped. July (C. D. Hull).

1. Culpepper Island, 27th July (C. M. Webster-Harris Exped. Harris).

1. Culpepper Island, 27th July (Otto Webster-Harris Exped. Limbke).

- Culpepper Island, 29th July (C. D. Webster-Harris Exped. I. Hull).
- 1. Culpepper Island, 29th July (C.D. H.). Webster-Harris Exped.
- Culpepper Island. 29th July (C. D. II.). Webster-Harris Exped.

#### Genus MICRANOUS, Saunders.

## Micranous tenuirostris (Temm.).

Anous melanops, Gould, Handb. Birds Austr. ii, p. 417 (1865); Campbell, Nests & Eggs Austr. Birds, p. 68 (1883).

Anous tenuirostris, Milne-Edwards & Grandidier, Hist Nat. Maday., Ois. ii. p. 665, pl. 308, fig. 3 (1885); North, Nests & Eggs Austr. Birds, p. 359 (1889).

Mieranous tenuirostris, Saunders, Cat. Birds B. M. xxv. p. 144 (1896);

Sharpe, Hand-l. i. p. 138 (1899).

The only egg of the Lesser Noddy in the Collection is of a remarkably long and narrow shape. It is cream-coloured, sparingly marked (except at the broad end, where the markings are rather thickly disposed), with spots and tiny blotches of chocolate-brown. The underlying markings are of a pale purple colour. It measures 1.92 by 1.2.

1. Sevehelles (Paris Museum).

Saunders Coll.

## Micranous leucocapillus (Gould).

Anous tenuirostris, Salvin, Ibis, 1864, p. 383.

Anous leucocapillus, Gould, Handb. Birds Austr. ii. p. 419 (1865): Campbell, Nests & Eggs Austr. Birds, p. 68, pl. —. fig. 615 (1883).

Anous melanogenys, Crowfoot, Ibis, 1885, p. 264; MacFarlane, Ibis, 1887. p. 214; North, Nests & Eggs Austr. Birds, p. 376, pl. xxi. fig. 5 (1889). Micranous leucocapillus, Saunders, Cat. Birds B. M. xxv. p. 145 (1896): Sharpe, Hand-l, i. p. 138 (1899).

The eggs of the White-capped Noddy are mostly of a broad oval form, but some are quite elliptical. The ground varies from nearly pure white to cream-colour and pale pink. The markings on nearly all the eggs are confined to the larger end, but in a few they are evenly spread over the whole shell. The surface-markings, which vary in size from speeks and spots to huge blotches, are of a deep reddish brown or chocolate-brown, and with these are sometimes intermingled some lines and comma-like dashes. The underlying markings are of a pale purple colour, few and inconspicuous. Feebly marked examples are not uncommon, the markings consisting of only a few dots. The eggs measure from 1.65 to 1.95 in length, and from 1.2 to 1.32 in breadth.

- South-west-of-all Cay, Brit. Hon- Salvin-Godman Coll. 24. duras, 12th May (O, Salvin).
  - Glover's Reef, Brit. Honduras, May Saunders Coll. (O. Salvin).
  - 4. Philip Island, near Norfolk Island, Dr. W. M. Crowfoot [P.]. Nov.
  - Norfolk Island.

Vostock Island, Low Archipelago, 22nd Oct. (J. R. H. MacFarlane).

Dr. W. M. Crowfoot [P.]. Saunders Coll.

## Genus GYGIS, Wagler.

# Gygis alba (Sparrm.).

Gygis candida, Gould, Handb. Birds Austr. ii. p. 405 (1865); Milne-Edwards & Grandidier, Hist. Nat. Madag., Ois. ii. p. 660, pl. 308. figs. 5, 5 a (1885); Crowfoot, Ibis, 1885, p. 266; North, Nests & Eggs Austr. Birds, p. 374, pl. xxi. fig. 4 (1889); Lister, P. Z. S. 1891, p. 297; Saunders, Cat. Birds B. M. xxv. p. 149 (1896). Gygis alba, Sharpe, Hand-l. i. p. 138 (1899).

The eggs of the White Tern are more uniformly elliptical in shape than those of any other member of this Family. The ground varies and is dull white, cream-colour, stone-colour or pale buff. The markings are of an extraordinary character, consisting of scrolls, lines, specks, spots and blotches, thickly spread over the egg, and forming a very handsome pattern. The surface-markings vary from pale yellowish brown to brown and blackish brown, and the underlying markings are of a pale purple colour. In some examples the markings, although everywhere dense, are still more crowded at the larger end and form a zone. Numerous specimens vary from 1.52 to 1.32 in length, and from 1.17 to 1.32 in breadth.

Ascension Island (Dr. Gill).
 Mauritius.
 Rodriguez Island (H. H. Slater).
 Ducie Island, South Pacific.
 Saunders Coll.
 F. Belcher [P.].
 Transit of Venus Exped.
 Saunders Coll.

 Phœnix Island\*, Phœnix Group, J. J. Lister, Esq. [P.]. 29th June.

2. Canton Island \*, Phenix Group, 1st J. J. Lister, Esq. [P.].

 Hull İsland\*, Phœnix Group, 11th J. J. Lister, Esq. [P.]. July.

# Sub-Family RHYNCHOPINÆ.

# Genus RHYNCHOPS, Linn.

# Rhynchops nigra, Linn.

(Plate XV. fig. 8.)

Rhynchops nigra, Thien. Fortpflanz. ges. Vög. tab. lxxxii. fig. 1 (1845-54);
Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 192 (1884);
Saunders, Cat. Birds B. M. xxv. p. 153 (1896); Sharpe, Hand-Li. p. 138 (1899).

The eggs of the Black Skimmer vary from a long and narrow to a broad pointed, oval form. The ground varies from cream-colour to

<sup>\*</sup> These eggs may possibly be those of the closely allied G. kittlitzi, Hartert, but no specimen of the bird from the Phonix Islands is available for examination.

very pale buff, and is sometimes tinged with pink. The markings consist of spots and blotches of most irregular shape, and two or more are often confluent, forming a huge patch. Most of the markings are blackish brown, frequently turning to pale chestuut or red at the edges; some are entirely reddish brown. The underlying markings are of an inky-purple colour and are of the same size and disposition as the surface-markings. The eggs measure from 1.6 to 1.95 in length, and from 1.2 to 1.35 in breadth.

1. 2. 3. 2. 2. 1. 1. 1. 3. 3. 3. 3. 3. 4. 4. 4.	North America (Smiths. Inst.). North America (T. M. Brewer). Cobbs Island, Virginia, 15th June. Cobbs Island, 20th June. Cobbs Island, 20th June. Cobbs Island, 29th June. Cobbs Island, 23rd June. Cobbs Island, 23rd June. Cobbs Island, 23rd June. Cobbs Island, 23rd June. Cobbs Island, 23rd June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June. Cobbs Island, 27th June.	Salvin-Godman ( Salvin-Godman ( W. E. D. Scott,	Coll. Esq. [C.].	Princeton University, N.J. [E.]
4.	Cobbs Island, 27th June.			N
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		"	"	$\Xi$
3,	Cobbs Island, 27th June.	"	"	÷
3.	Cobbs Island, 27th June.	"	"	
2.	Cobbs Island, 27th June.	**	"	1
2.	Cobbs Island, 28th June.	17	,,	
3.	Cobbs Island, 28th June.	"	,,	
2.	Cape Charles, Virginia, 18th June.	"	,,	
2.	Cape Charles, 18th June.	o: D: " 10	"Da	
3.	Florida.	Sir Richard Owe	n [P.].	

# Rhynchops melanura, Swains.

(Plate XV. fig. 9.)

Rhynchops melanura, Scl. & Salv. P. Z. S. 1866, p. 201; Saunders. Cat. Birds B. M. xxv. p. 156 (1896); Sharpe, Hand-l. i. p. 138 (1899).

The eggs of the Black-tailed Skimmer are of a broad oval form, short and rounded. The ground is of a pale buff colour, and this is spotted and blotched all over with chocolate-brown and underlying pale purple. Eleven specimens measure from 1.55 to 1.8 in length, and from 1.25 to 1.4 in breadth.

 Ucayali River, Upper Amazonia Saunders Coll. (E. Bartlett).

# Rhynchops flavirostris. V.

Rhynchops flavirostris, Baedeker, L. Brehm & A. Brehm, J. f. O. 1853, App. p. 117, tab. v. fig. 2; Heugl. Vög. N. O.-Afr. ii. pt. 11, p. 1463, pl. 50. fig. 3 (1873); Saunders, Cat. Birds B. M. xxv. p. 158 (1896); Sharpe, Hand-l. i. p. 138 (1899).

The eggs of the Yellow-billed Skimmer resemble those of R. melanura, but are smaller. Some of the specimens are of a remarkably narrow, elongated form. They measure from 1.53 to 1.64 in length, and from 1.12 to 1.17 in breadth.

River Niger, W. Africa.

Ambukol, Soudan, May (Col. W. Verner).

1. South Africa.

Dr. Cuthbert Christy [P.]. Seebohm Coll.

Old Collection.

# Rhynchops albicollis, Swains.

(Plate XV. fig. 4.)

Rhynchops albicollis, Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 316 (1890); Saunders, Cat. Birds B. M. xxv, p. 159 (1896); Sharpe, Hand-l. i. p. 138 (1899).

The eggs of the Indian Skimmer are of a broad oval form, more or less pointed at the smaller end. The ground varies from pale cream-colour to pale buff, and, when the eggs are fresh, it is frequently tinged with grey, green or pink. The markings, which consist of bold streaks and blotches, are of a reddish-brown or chocolate-brown colour, and sometimes they are so intensely dark as to appear almost black. There are also the usual underlying p le purple markings. As pointed out by Mr. Hume, the streaks frequently lie at an angle with the longitudinal axis of the egg. The eggs measure from 1.45 to 1.75 in length, and from 1.05 to 1.3 in breadth.

	India. Wazirabad, 1st May. Delhi ( <i>C. T. Bingham</i> ).	Gould Coll. Hume Coll. Hume Coll.
1.	Delhi.	Hume Coll.
3.	Futtehgurh, 3rd April (A. Ander-	Saunders Coll.
	son).	
8.	Futtehgurh, 30th April (A. A.).	Seebohm Coll.
24.	Allahabad, 14th March (C. T.	Hume Coll.
	Bingham).	
10	Allahabad, 18th March (C. T. B.).	Hume Coll.
2.	Mirzapur (W. E. Brooks).	Seebohm Coll.
18.	Etawah, 16th March (A. O. Hume).	Hume Coll.
11.	Etawah, 12th-15th March	Hume Coll.
	(A. O. H.)	
3.	Etawah, 6th April (A. O. H.).	Hume Coll.
1.	Moulmein, Burma.	Hume Coll.

# Sub-Family LARINÆ.

Genus XEMA, Leach.

# Xema sabinei (J. Sabine).

(Plate XVIII. fig. 3.)

Xema sabinii, Newton, P. Z. S. 1871, p. 57, pl. iv. fig. 5; Dresser, Birds Eur. viii. p. 337 (1874); Nelson, Rep. Nat. Hist. Alaska, p. 56 (1887); MacFarlane, Proc. U. S. Nat. Mus. xiv. p. 419 (1891); Saunders, Cat. Birds B. M. xxv. p. 162 (1896); Sharpe, Hand-l. i. p. 139 (1899).

Xema sabini, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 269 (1884).

Larus sabinii, Seebohm, Brit. Birds, iii. p. 298, pl. 54 (1885): id. Eggs of Brit. Birds p. 105, pl. 36, fig. 8 (1896).

The eggs of Sabine's Gull are usually of a pointed oval form, but some are pyriform. In coloration, they closely resemble the eggs of the Skuas. The ground is of a brown colour of various shades, tinged with olive. The markings consist of spots and small blotches, are pale and indistinct, and are pretty evenly distributed over the whole shell, but in a few specimens there is a tendency for these to form a zone or imperfect cap at the larger end. The surface-markings are brown; and the underlying markings greyish brown. Numerous examples measure from 1.62 to 1.95 in length, and from 1.17 to 1.33 in breadth.

North America (Henshaw Coll.).
 East of Anderson River, Arctic

America (Henshaw Coll.).
2. St. Michael's, Alaska, 6th June (E. W. Nelson).

 St. Michael's, 13th June (E. W. N.).
 St. Michael's, 6th June (Henshaw Coll.).

1. Cambridge Bay, Arctic America (Capt. Collinson).

3. Franklin Bay (R. MacFarlane, R.N.).

Salvin-Godman Coll. Salvin-Godman Coll.

Salvin-Godman Coll.

Salvin-Godman Coll. Salvin-Godman Coll.

Voy. H.M.S. 'Enterprise.'

Saunders Coll.

# Genus CREAGRUS, $B_{P}$ .

# Creagrus furcatus (Nébou.e).

(Plate XVI, fig. 3.)

Xema furcata, Saunders, Cat. Birds B. M. xxv. p. 165 (1896); Rothsch. § Hartert, Nov. Zool. vi. p. 196 (1899). Creagrus furcatus, Sharpe, Hand-l. i. p. 139 (1899).

The eggs of Néboux's Gull are of a perfectly regular oval form. The ground is of a light cream-colour or very pale buff, occasionally with a faint tinge of green. The underlying markings are numerous, large, and of a pale purple colour. The surface-markings, consisting of spots and large blotches of deep chocolate-brown or blackish brown, are evenly distributed over the shell, but as in

the case of the eggs of most Gulls, they are much bolder at the larger end than elsewhere. Five specimens measure from 2.5 to 2.62 in length, and from 1.75 to 1.8 in breadth.

 Wenman Island, Galapagos, 31st July Webster-Harris Exped. (C. M. Harris).

1. Wenman Island, 31st July (C. M. H.). Webster-Harris Exped.

 Wenman Island, 31st July (C. M. H.). Webster-Harris Exped.
 Wenman Island, 4th Aug. (R. H. Webster-Harris Exped. Beck).

 Culpepper Island, Galapagos, 28th Webster-Harris Exped. July (C. M. Harris).

#### Genus LARUS, Linn.

#### Larus minutus, Pall.

Larus minutus, Thien. Fortpflanz. ges. Vög. tab. lxxxvii. fig. 4, a-e (1845-54); Dresser, Birds Eur. viii. p. 373 (1871); Seebohm, Brit. Birds, iii. p. 301, pl. 54 (1885); id. Eggs of Brit. Birds, p. 107, pl. 36. figs. 1, 2 (1896); Saunders, Cat. Birds B. M. xxv. p. 173 (1896); Sharpe, Hand-l. i. p. 139 (1899).

Hydrocolæus minutus, Baedeker, Eier Eur. Vög. tab. 72. fig. 5 (1855-63).

The eggs of the Little Gull are very varied. Many are of a regular oval form, but the majority are pointed at the smaller end. The ground varies from pale buff to brown and olive-brown. The markings are dark brown, frequently approaching black, and underlying pale purple. They vary in size from spots to large blotches, and are fairly equally distributed over the whole shell. The eggs measure from 1.5 to 1.75 in length, and from 1.13 to 1.23 in breadth.

- Esthonia, Gulf of Finland, 29th Seebohm Coll. May (Russow).
  - 2. Lake Ladoga (Meves: Hargitt Coll.). Seebohm Coll.
  - Lake Ladoga, 1st June (Meves: Seebohm Coll. Hargitt Coll.).
- Lake Ladoga, 5th June (Meves: Seebohm Coll. Hargitt Coll.).
- Lake Ladoga, 5th June (Meves: Seebohm Coll. Hargitt Coll.).
- Lake Ladoga, 5th June (Meves: Seebohm Coll. Hargitt Coll.).
- 4. Lake Ladoga, 5th June (Meves). Salvin-Godman Coll.
- Lake Ladoga, 3rd June (Meves). Saunders Coll.
   Lake Ladoga, 5th June (Meves). Saunders Coll.

# Larus ichthyaëtus, Pall.

Larus ichthyaëtus, Thien. Fortpflanz. ges. Vög. tab. lxxxvii. fig. 1, a-c (1845-54); Dresser, Birds Eur. viii. p. 369 (1873); Bree, Birds Eur. 2nd ed. v. p. 83, pl.—(1876); Legge, Birds Ceyl. p. 1046 (1880); Seebohm, Eggs of Brit. Birds, p. 109, pl. 35. figs. 3, 4 (1896); Saunders, Cat. Birds B. M. xxv. p. 176 (1896); Sharpe, Hand-l. i. p. 139 (1899).

The eggs of the Great Black-headed Gull appear to be very

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constant to one type. In shape they are regular ovals, sometimes slightly compressed at the smaller end. The ground-colour is pale buff, and the markings, which consist of spots, streaks and blotches, are, on some specimens yellowish brown, on others, the majority, dark blackish brown. The underlying markings are pale purple. The markings are firm and well defined, and are generally evenly spread over the shell, but in some examples the blotches are large and confluent and are collected at the larger end; whereas in others the markings are all comparatively small and delicate. The eggs measure from 2.9 to 3.3 in length, and from 2 to 2.2 in breadth.

1. South Russia. Saunders Coll.
4. Caspian Sea. Saunders Coll.
15. Astrakhan (*Henké*). Seebohm Coll.

## Larus melanocephalus, Natt.

Larus melanocephalus, Thien. Fortyflanz. ges. Vög. tab. lxxxvii. fig. 3 (1845-54); Bree, Birds Eur. 2nd ed. v. p. 78, pl.—(1876); Dresser, Birds Eur. viii. p. 365 (1878); Seebohm, Eggs of Brit. Birds, p. 108, pl. 34. figs. 3, 4 (1896); Saunders, Cat. Birds B. M. xxv. p. 180 (1896); Sharpe, Hand-l. i. p. 139 (1899).

Gavia melanocephala, Baedeker, Eier Eur. Vöy. tab. 72. fig. 4 (1855-63).

The eggs of the Adriatic Black-headed Gull vary in shape from a short broad oval to an elongated oval. Of the seven specimens in the Collection, one, although much stained, appears to have been unspotted white; three are of a creamy-buff colour, rather sparingly spotted with yellowish brown or blackish brown and the usual underlying pale purple; and three are olive-buff, boldly blotched wifh chocolate-brown, yellowish brown and pale purple. They vary from 1.87 to 2.2 in length, and from 1.4 to 1.5 in breadth.

Southern Europe.
 Dobrudscha.
 Dobrudscha, 24th June (W.H. Cullen).
 Saunders Coll.
 Sunders Coll.

# Larus philadelphia (Ord).

Chroicocephalus philadelphia, Newton, P. Z. S. 1871, p. 57, pl. iv. fig. 6. Larus philadelphia, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 260 (1884); Seebohm, Brit. Birds, iii. p. 307, pl. 54 (1885); MacFarlane, Proc. U.S. Nat. Mus. xiv. p. 448 (1891); Seebohm. Eggs of Brit. Birds. p. 106, pl. 36. fig. 7 (1896); Saunders, Cat. Birds B. M. xxv. p. 185 (1896); Dresser. Birds Eur. ix. (Suppl.) p. 387 (1896); Sharpe, Hand-l. i. p. 139 (1899).

The eggs of Bonaparte's Gull vary from a short rounded, to an elongated narrow, oval form. The ground is olive-buff. The markings vary in colour from yellowish brown to dark blackish brown, and there are the usual underlying pale purple clouds and 206

spots, which are somewhat indistinct. The markings are small and have a tendency to form a very irregular and ill-defined zone round the larger end. Five examples vary from 1.75 to 2.08 in length, and from 1.3 to 1.4 in breadth.

- Anderson River Fort, Arctic America Saunders Coll. (R. MacFarlane).
- 1. Anderson River (R. MacF.: Smiths. Salvin-Godman Coll. Inst.).
- 1. Anderson River (R. MacF.: Henshaw Salvin-Godman Coll. Coll.).

## Larus franklini, Swains. & Rich.

Larus franklini, Newton, P. Z. S. 1871, p. 57, pl. iv. fig. 4; Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 258 (1884); Saunders, Cat. Birds B. M. xxv. p. 191 (1896); Sharpe, Hand-l. i. p. 140 (1899).

The six eggs of Franklin's Rosy Gull in the Collection vary in form from pointed to blunt eval. The ground-colour is olive-buff, and this is spotted and bletched with vellowish brown, blackish brown, and underlying pale purple. On two eggs the markings take the form of streaks and lines, which are interlaced and form an intricate pattern. The eggs measure from 2.02 to 2.15 in length, and from 1.37 to 1.45 in breadth.

Salvin-Godman Coll. N. America (Smiths. Inst.).

Saunders Coll. Manitoba Lake (D. Gunn: Smiths. Inst.).

Manitoba Lake (D. Gunn: Henshaw Salvin-Godman Coll. 3. Coll.).

#### Larus atricilla. Linn.

Atricilla catesbaei, Baedeker, Eier Eur. Vög. tab. 72. fig. 2 (1855-63). Larus atricilla, Baird, Brewer & Ridgw, Water Birds N. Am. ii. p. 254 (1884); Seebohm, Brit. Birds, iii. p. 315, fig. 52 (1885); Saunders, Cat. Birds B. M. xxv. p. 194 (1896); Sharpe, Hand-l. i. p. 140 (1899).

The eggs of the Laughing Gull are much of one type. They vary from a pointed to a blunt oval form. The ground-colour is a pale olive-buff and this is marked, pretty evenly all ever the shell, but occasionally more densely at the larger end than elsewhere, with spots and small blotches of yellowish brown, chocolate-brown, blackish brown, and inconspicuously with pale underlying purple. markings are sometimes linear and streaky. The eggs vary from 2 to 2.35 in length, and from 1.52 to 1.6 in breadth.

Salvin-Godman Coll. N. America (Smiths. Inst.). Long Island Seebohm Coll.

New Jersey (Krider: Hargitt Coll.).
New Jersey Coast (H. E. Dresser).
Hog Island, Virginia, June (Dr. Hitz: Salvin-Godman Coll. 1. Henshaw Coll.).

Saunders Coll. Cobbs Island, Virginia, 11th June. 1.

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<ol> <li>Cobbs Island, June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> </ol>	W. E. D. Scott	?? ?? ?? ?? ??	Princeton University, N.J. [E.].
5. Cobbs Island, 21st June.	"	,,	=
2. Cobbs Island, 21st June.	"	,,	5
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1. Cobbs Island, 21st June.	"	"	. –
<ol> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 21st June.</li> </ol>	75	"	$\Xi$
<ol> <li>Cobbs Island, 21st June.</li> <li>Cobbs Island, 23rd June.</li> </ol>	"	,,	÷
<ol> <li>Cobbs Island, 23rd June.</li> <li>Cape Charles, Virginia, 15th June.</li> </ol>	"	"	
	**	,,	
1. Galveston, Texas, 2nd June	Saunders Coll.	"	
$(II.\ E.\ Dresser).$			

# Larus cirrhocephalus (V.).

(Plate XVI. fig. 5.)

Larus cirrhocephalus, Scl. & Huds. Argent. Orn. ii. p. 201 (1889); Holland, Ibis, 1895, p. 216; Saunders, Cat. Birds B. M. xxv. p. 198 (1896); Sharpe, Hand-l. i. p. 140 (1899).

The eggs of the Grey-eapped Gull in the Collection are of a pretty regular oval form, but some are compressed or pointed at the small end. The ground varies from dark cream-colour to olive-buff, and there is a decided tinge of green running through the paler specimens. In three-fourths of the examples the markings, which consist of spots, lines, and medium-sized blotches, are evenly distributed over the egg; but in the remainder the markings form a very irregular cap or zone at the large end. The surface-markings are yellowish brown, rufous brown or blackish brown, and the underlying ones, which are inconspicuous, are very pale purple. The eggs measure from 1.96 to 2.5 in length, and from 1.5 to 1.7 in breadth.

59. Argentine Republic, Nov. & Dec. A. H. Holland, Esq. [P.].

# Larus maculipennis, Licht.

(Plate XVI. fig. 1.)

Larus maeulipennis, Scl. & Huds. Argent. Orn. ii. p. 198 (1899); Saunders, P. Z. S. 1891, p. 373; Holland, Ibis, 1895, p. 216; Saunders, Cat. Birds B. M. xxv. p. 200 (1896); Sharpe, Hand-l. i. p. 140 (1899).

The eggs of the Spot-winged Gull are remarkably varied both with regard to the ground-colour and the disposition of the markings. They are of a regular oval form, sometimes pointed. Three eggs are of a pale unspotted blue colour; another is blue, sparingly

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marked with yellowish brown. The remainder vary from pale greenish grey to olive-brown and deep buff. The markings, which are yellowish brown or blackish brown, with some underlying pale purple, consist of spots and blotches disposed over the shell in an infinite number of patterns. Numerous specimens measure from 1.9 to 2.2 in length, and from 1.37 to 1.5 in breadth.

2. Buenos Ayres (E. W. W.). Saunders Coll. 37. Argentine Republic, Oct. to Dec. A. H. Holland, Esq. [C.].

# Larus glaucodes, Menen.

(Plate XVI. fig. 2.)

Gavia roseiventris, Gould, P. Z. S. 1859, p. 97.

Larus roseiventris, Abbott, Ibis, 1861, p. 166.

Larus glaucodes, Saunders, Zool. 'Challenger' Exped. ii. pt. viii. p. 138 (1880); id. Cat. Birds B. M. xxv. p. 203 (1896); Sharpe, Hand-l. i. p. 140 (1899).

Larus, sp. inc., Scl. Zool. 'Challenger' Exped. ii. pt. viii. p. 151 (1880).

The eggs of the Pink-bellied Gull are as varied as the eggs of L. maculipennis, and present the same types of coloration. They measure from 1.95 to 2.3 in length, and from 1.4 to 1.53 in breadth. There can be little doubt but that the two eggs collected by the 'Challenger' Expedition and marked "Tern Gull" belong to this species.

 Falkland Islands (C. C. Abbott).
 Falkland Islands (C. C. A.). Gould Coll. Salvin-Godman Coll.

 Falkland Islands (Dr. Deane). Saunders Coll. Falkland Islands.

Voy. II.M.S. 'Challenger.'

#### Larus ridibundus. Linn.

Larus ridibundus, Thien. Fortpflanz. ges. Vög. tab. lxxxvii. fig. 2. a-k (1845-54); Hewitson, Eggs of Erit. Birds, ii. p. 491, pl. cxxxvi. figs. ii, iii (1856); Seebohm, Brit. Birds, iii. p. 310, pl. 53 (1885); Bresser, Birds Eur. viii. p. 357 (1878); Seebolm, Eggs of Brit. Birds, p. 108, pl. 34. figs. 1, 2 (1896); Saunders, Cat. Birds B. M. xxv. p. 207 (1896); Sharpe, Hand-l. i. p. 140 (1899). Gavia ridibunda, Baedeker, Eier Eur. Vog. tab. 72. fig. 3 (1855-63).

The eggs of the Black-headed Gull are subject to great variation both in shape and colour. The majority of the eggs are of a pointed oval form. In colour they are greenish grey, olive-buff or dark olive-brown, marked in every conceivable manner with brown and blackish brown of many shades, and underlying pale purple. A few specimens are plain blue. They measure from 1.85 to 2.45 in length, and from 1.25 to 1.65 in breadth.

Loch Ashie, Inverness, 3rd June Seebohm Coll. 75. (E. Hargitt).

Doune Lodge, Stirlingshire (E. Har-Seebohm Coll.

England (Hargitt Coll.). Seebohm Coll. 4. Saunders Coll. Walney Island, Lancashire.

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5. Walney Island, 4th June (II. Saun- Saunders Coll. ders).

Walney Island, 3rd June (P. God-Salvin-Godman Coll. 3.

man).

7. Old Collection. Norfolk. Scoulton Mere, Norfolk, May. Saunders Coll. 4.

7. Scoulton Mere (Reynolds). Salvin-Godman Coll.

11. Scoulton Mere.

Seebohm Coll. 18. Seebolm Coll. Scoulton Mere, 14th May (II. Sec-

Near Dungeness, 2nd June (H. Saunders Coll. Saunders).

Copenhagen, 20th May. 18. Seebolim Coll.

#### Larus hemprichi (Bruch).

(Plate XVI, fig. 4.)

Larus hemprichi, *Heugl. Vög. N.O.-Afr.* ii. pt. 11, p. 1399, pl. 50. fig. 5 (1873); Oates ed. Hume, Nests & Eggs Ind. B. iii, p. 293 (1890); Saunders, Cat. Birds B. M. xxv. p. 221 (1896); Sharpe, Hand-l. i. p. 140 (1899).

The eggs of Hemprich's Gull are all very much of one type and may be easily recognized. They are of a broad, and somewhat pointed, oval form. The ground varies between cream-colour and pale creamy buff. The markings, consisting of spots and small blotches with, occasionally, a few lines, are all distinct and separate and show no tendency to be confluent, nor are they, as a rule, more densely disposed at the large end than elsewhere. In fact, the even distribution of the markings over the whole shell is the leading feature of the eggs of this species. The surface-markings are of various shades of yellowish brown, occasionally deepening to a chocolate-brown, the underlying markings being very pale purple. The eggs vary from 2.1 to 2.45 in length, and from 1.45 to 1.72 in breadth.

135.Island of Astolah, Mekran Coast, Hume Coll. 6th Aug. (*E. A. Butler*).

# Larus crassirostris, V.

(Plate XVII, fig. 4.)

Larus crassirostris, Swinhoe, Ibis, 1875, p. 138; Seebohm, Birds Japan. Emp. p. 293 (1890); Saunders, Cat. Birds B. M. xxv. p. 227 (1896); Sharpe, Hand-l. i. p. 140 (1899).

The few eggs of Temminck's Gull in the Collection are very They are of a regular oval form. The ground-colour is olive-brown, and it is evenly marked all over with spots and very small blotches of yellowish and chocolate-brown, with some underlying pale purple clouds and streaks. Seven specimens measure from 2.35 to 2.5 in length, and from 1.7 to 1.8 in breadth.

 Yokohama, Japan (II. Pryer). Seebohm Coll.

3. Alceste Island, Shantung Promon- Saunders Coll. tory, China, 10th June.

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## Larus gelastes, Thienem.

Larus gelastes, Thien. Fortpflanz. ges. Vög. tab. xc. fig. 4 (1845-54); Saunders, Ibis, 1871, p. 400; Bree, Birds Eur. 2nd ed. v. p. 72, pl. — (1876); Dresser, Birds Eur. viii. p. 389 (1878); Oates ed. Hume, Nests & Eggs Ind. B. iii. p. 294 (1890); Sharpe, Ibis, 1891, p. 115; Saunders, Cat. Birds B. M. xxv. p. 230 (1896); Sharpe, Hand-l. i. p. 140 (1899).

Gelastes lambruschinii, Baedeker, Eier Eur. Vög. tab. 72. fig. 1 (1855-63).

The eggs of the Slender-billed Gull are fairly uniform in colour. They are of a broad, pointed oval form. The ground of the majority of the eggs is pure white, but a few have it of a pale creamcolour, and others of a pinkish buff-colour. The surface-markings, consisting of spots and blotches, are frequently black; at times vellowish brown, chocolate-brown, or even reddish brown. underlying markings are of a pale purple and very conspicuous. On many examples, the surface-markings are small and evenly distributed over the shell; on others, they consist of huge blotches as well as spots, and they are frequently massed together at the broad end, where they form an ill-defined cap or zone. Some specimens are marked with lines and scrawls. The eggs measure from 2.1 to 2.27 in length, and from 1.45 to 1.6 in breadth.

South Spain. Lord Lilford [P.]. San Lucar, Spain, May (Ruiz). Saunders Coll. Delta of the Danube (T. Holland). 4. Seebohm Coll. Black Sea, June (W. II. Cullen). 3. Seebohm Coll.

Dobrudscha, 30th June (W. H. C.). Dr. C. R. Bree [P.]. 1. Dobrudscha, 1st July (W. H. C.). Dr. C. R. Bree [P.].

3. Dobrudscha, 10th June (H. See-Seebohm Coll.

16. Delia of the Volga (*Henke*). Seebohm Coll. 1. Saunders Coll. Smyrna.

Lake Menzaleh, Egypt (E. C. Saunders Coll. Taylor).

7. Abdullah Bank, Persian Gulf, W. D. Cumming, Esq. [P.]. April.

Osmarra, Mekran Coast, 28th May Saunders Coll. (E. A. Butler).

21. Osmarra, 28th May (E. A. E.). Hume Coll.

# Larus novæ-hollandiæ, Steph.

Bruchigavia jamesonii, Gould, Hundb. Birds Austr. ii. p. 387 (1865); Campbell, Nests & Eggs Austr. Birds, p. 65 (1883). Bruchigavia gouldi, Gould, Handb. Birds Austr. ii. p. 388 (1865).

Xema novæ-hollandiæ, North, Nests & Eggs Austr. Birds, p. 351, pl. xx. fig. 4 (1889).

Larus novæ-hollandiæ, Le Souëf, Ibis, 1895, p. 421; Saunders, Cat. Birds B. M. xxv. p. 235 (1896); Sharpe, Hand-l. i. p. 141 (1899).

The small series of eggs of the Silver Gull in the Collection shows that there is considerable variation in their colour. They are of a rather broad oval form, about half of the specimens being pointed and the others blunt. The ground varies from pale green to pale

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buff, olive-buff, and light stone-colour. The markings are sometimes deep black, at other times yellowish brown and chocolate-brown, and there are the usual pale purple underlying spots and blotches. Examples measure from 2 to 2 3 in length, and from 1 45 to 1 6 in breadth.

1. Anstralia.

2. Australia.

3. Jones's Island, N.W. Australia.

2. Gippsland, Victoria. 3. Tasmania (Wilson).

Tasmania (Wilson).
 Port Davey, Tasmania.

Saunders Coll. Gould Coll.

Lieut. G. Oliver [P.].

F. A. Philbrick, Esq., Q.C. [P.].

Gould Coll.

# Larus scopulinus, Gray.

Larus scopulinus, Potts, Tr. N. Z. Inst. ii, p. 76 (1869); Buller, Birds New Zeal. 2nd ed. ii, p. 55 (1888); Saunders, Cat. Birds B. M. xxv. p. 238 (1896); Sharpe, Hand-l. i. p. 141 (1899).

The eggs of the Red-billed Gull in the Collection are very similar to each other. They are of a rather narrow oval shape. The ground is of an olive-buff colour, and this is marked with well-defined small spots and blotches of yellowish and chocolate-brown and underlying pale purple. In three examples there is a distinct tendency for the markings to form an irregular zone round the large end. Four specimens measure respectively: 2·2 by 1·45, 2·15 by 1·45, 2·17 by 1·55.

4. New Zealand.

Sir George Grey [P.].

# Larus hartlaubi (Bruch).

(Plate XVII. fig. 2.)

Larus hartlaubi, Sharpe, ed. Layard, Birds S. Africa, p. 698 (1884); Saunders, Cat. Birds B. M. xxv. p. 240 (1896); Sharpe, Hand-t. i. p. 141 (1899).

Of the two eggs of Hartlaub's Gull in the Collection, one is of a very pale greenish stone-colour and the other is buff-coloured. In both, the markings are pale purple, purplish brown or yellowish brown, and they are evenly and somewhat densely distributed over the shell. The specimens measure respectively: 2·19 by 1·42; 2·16 by 1·41.

2. Saldana Bay, South Africa.

E. L. Layard, Esq. [P.].

P 2

# Larus marinus, Linn.

Larius marinus, Thien. Fortpflanz. ges. Vöy. tab. lxxxviii. fig. 1. a-d (1845-54); Baedeker, Eier Eur. Vöy. tab. 62. fig. 1 (1855-63);
Hewitson, Eggs of Brit. Birds, ii. p. 501, pl. exh. fig. i (1856);
Dresser, Biras Eur. viii. p. 427 (1872); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 225 (1884); Seebolon, Brit. Birds, iii. p. 323, pl. 52 (1885); id. Eggs of Brit. Eirds, p. 111, pl. 35. figs. 1, 2 (1890); Saunders. Cat. Eirds B. M. xxv. p. 241 (1896); Sharpe, Hand-l. i. p. 141 (1899).

The eggs of the Great Black-backed Gull vary but little. In shape they are regular ovals, sometimes broad, sometimes narrow. In the large series in the Collection, one egg is of a plain blue colour, and another is blue with a few brown markings, but the remaining specimens exhibit little variety. The ground of all is of a pale creamy buff or light stone-colour with an olive tinge. The markings, which are of a yellowish-brown or blackish-brown colour, with some underlying pale purple, are of small size and are very evenly distributed over the shell, only in rare cases forming an approach to a cap or zone at the large end. A few examples exhibit somewhat larger blotches. The eggs measure from 2.7 to 3.2 in length, and from 2 to 2.2 in breadth.

2. I.	Sukkenstappen, West Greenland. Faröe Islands. 29th May (H. C.	Seebohm Coll. Seebohm Coll.
1.	Müller: Hargitt Coll.).	
1.	Shetland Islands (R. Dunn).	Seebohm Coll.
1.	Stromness, Orkneys (R. Dunn: Har-	Seebohm Coll.
	gitt Coll.).	

Souliskerry, Orkneys, 15th June Seebohm Coll. (Hargitt Coll.).

Loch Ashie, Inverness (Hargitt Coll.).

Bass Rock, Firth of Forth.

Saltee Islands, Ireland, 27th May (H, S. & V.).

Saltee Islands, 27th May. 3. 1. Cumberland (Heyshum).

Lundy Island, Bristol Channel, May (II. Saunders).

1. Lundy Island, 25th May (H. S.). Lundy Island, 1st June (H. S.). Lundy Island, 3rd June (H. S.). 9.

6. Tromsö, Norway, 11th June (H. Sechohm).

Tamsö, Finmark. 1.

Triktiln Island, Smölen Islands. 3. 26th May (R. B. Sharpe).

Triktiln Island, 26th May (R. B. S.). 3. Triktiln Island, 28th May (R. B. S.). 33.

Triktiln Island, 28th May (R. B. S.).

Sandhavn, Sweden, Mav.

Seebohm Coll.

Salvin-Godman Coll.

Seebohm Coll. Seebohm Coll.

Gould Coll. Saunders Coll.

Saunders Coll. Saunders Coll. Saunders Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll. Dr. R. Bowdler Sharpe [P.].

Dr. R. Bowdler Sharpe [P.].

Dr. R. Bowdler Sharpe [P.] Dr. R. Bowdler Sharpe [P.].

# Larus dominicanus, Licht,

Larus dominicanus, Thien. Fortpflanz. ges. Vög. tab. lxxxviii. fig. 2 (1845-54); Abbott, Ibis, 1861, p. 165; Potts, Tr. N. Z. Inst. ii. p. 75 (1869); Sharpe, Phil. Trans. 168, p. 107 (1879); id. ed. Layard, Birds S. Africa, p. 697 (1875-84); Saunders, Zool. Challenger' Evped. ii. pt. viii. p. 139 (1880); Scl. t. c. p. 151 (1880); Buller, Birds New Zeal, 2nd ed. ii. p. 47 (1880); Saunders, Cut. Birds B. M. xxv. p. 245 (1896); Sharpe, Hand-l. i. p. 141 (1899); Hall, Ibis, 1900, p. 10.

Larus antipodus, Thien. Fortpflanz. ges. Vög. tab. xic. fig. 2 (1845-54).

The eggs of the Southern Black-backed Gull closely resemble

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those of *L. marinus*, but the ground-colour is more varied, many specimens being of a dark olive-buff. The markings are of the same colour and character as in the eggs of *L. marinus*; but it may perhaps be said of them that they are, on the whole, coarser, and that in a larger proportion of the eggs they form a very irregular cap or zone at the large end. Specimens measure from 2.45 to 3.1 in length, and from 1.8 to 2.05 in breadth.

3. Saldana Bay, S. Africa.

S. Africa.
 S. Africa.

1. Crozet Islands, S. Atlantic (Capt.

Armson).
1. Kerguelen Island, S. Atlantic.

23. Kerguelen Island, 8th Dec. (A. E. Eaton).

2. Kerguelen Island, 8th Dec. (Transit of Venus Exped.).

6. New Zealand.

1. Island in Desire River, Patagonia, 30th Nov. (J. McCormick).

2. Elizabeth Island, Straits of Magellan.

1. Peckett Harbour, Straits of Magellan.

13. Falkland Islands (C. C. Abbott).

Falkland Islands (C. C. A.).
 Falkland Islands (C. C. A.).

2. Falkland Islands.

1. Falkland Islands.

1. East Falkland.

Saunders Coll. Gould Coll.

E. L. Layard, Esq. [P.].

Saunders Coll.

Vov. 11.M.S. 'Challenger.'

Royal Society [P.].

Saunders Coll.

Sir George Grey [P.].

Saunders Coll.

Voy. H.M.S. 'Challenger.' Dr. Coppinger [P.].

Gould Coll.

Salvin-Godman Coll.

Saunders Coll.

Voy. II.M.S. 'Challenger.'

McCormick Bequest.

Lieut. A. Smith [P.].

Hybrid between L. argentatus and L. dominicanus.

2. Laid in confinement (Lilford Aviaries). Lord Lilford [P.].

# Larus fuscus, Linn.

Larvs fuscus, Thien. Fortpflanz. ges. Lög. tab. lxxxviii. fig. 4, a-f (1845-54); Bacdeker, Eier Eur. Vög. tab. 62. fig. 2 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 496, pl. cxxxix. fig. iii (1856); Dresser, Birds Eur. viii. p. 421 (1873): Seebohm, Brit. Birds, iii. p. 319, pl. 51 (1885); id. Eggs of Brit. Birds, p. 110, pl. 33. figs. 4, 5 (1896); Saunders, Cat. Birds B. M. xxv. p. 250 (1896); Sharpe, Hand-l. i. p. 141 (1899).

Like the eggs of *L. ridibundus*, those of the Lesser Blackbacked Gull are subject to great variation, the ground-colour ranging from a plain pale blue to a rich olive-brown. The markings are disposed on the shell in every conceivable pattern, from a few spots only to masses of huge confluent blotches of a yellowish-brown or blackish-brown colour. The eggs measure from 2·4 to 2·8 in length, and from 1·7 to 2 in breadth.

- Faröe Islands, 1st June (H. C. Seebohm Coll. Müller: Hargitt Coll.).
- Faröe Islands, 4th June (H. C. M.: Seebohm Coll. Hargitt Coll.).

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Farn Islands (E. II.). Farn Islands (H. Seebohm). 3, Farn Islands, June (H. S.). 21. Farn Islands, 3rd June (H. S.). 8.

Seebohm Coll. Farn Islands, 18th June (II. S.). Seebohm Coll. 5. Farn Islands (H.S.: Hargitt Coll.).

Sandhavn, Sweden, 12th June. Seebohm Coll.

# Larus affinis, Reinh.

Seebohm Coll.

Seebohm Coll.

# (Plate XVIII. fig. 4.)

Larus affinis, Seebohm & Harvie-Brown, Ibis, 1876, p. 452; Seebohm, Ibis, 1879, p. 162; Dresser, Birds Eur. viii. p. 417 (1880); Saunders, Cat. Birds B. M. xxv. p. 254 (1896); Sharpe, Hand-l. i. p. 141 (1899).

The eggs of the Allied Black-backed Gull in the Collection are all of one type, and resemble the commoner type of egg of L. fuscus, the

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ground being of an olive-buff colour and the markings being pretty evenly distributed over the egg. They vary from 2.55 to 3.1 in length, and from 1.75 to 2 in breadth.

- 2. R. Petchora, lat. 67½ N., 19th June Seebohm Coll. (II. Seebohm & J. A. Harvie-Brown).
- 1. R. Petchora, lat. 68° N., 26th June Seebohm Coll. (H. S. & J. A. H.-B.).
- Yenesei Valley, lat. 70½° N., 7th Seebohm Coll. 8. July (H. Seebokm).
- 13. Yenesei Valley, lat. 711 N., 10th Seebohm Coll. July (H. S.).

#### Larus occidentalis, Audub.

Larus occidentalis, Baird, Brewer & Ridgw. Water Birds N. Am. ii p. 230 (1884); Saunders, Cat. Birds B. M. xxv. p. 257 (1896); Sharpe, Hand-l. i. p. 141 (1899).

The four eggs of the Western Gull in the Collection are absolutely indistinguishable from those of L. affinis and typical eggs of L. fuscus. They measure respectively: 2.50 by 1.9; 2.71 by 1.9; 2.9 by 1.9; 2.83 by 2.

1. Pyramid Lake, Nevada.

Saunders Coll.

2. Farallones Point, Mexico (H. Gruber: Salvin-Godman Coll. Henshaw Coll.).

1. N. America.

Salvin-Godman Coll.

# Larus argentatus, Gm.

Larus argentatus, Thien. Fortpflanz. ges. Vög. tab. xic. fig.  $4, \alpha-i$  (1845–54); Hewitson, Egys of Brit. Birds, ii. p. 499, pl. cxl. (1856); Dressev, Birds Eur. viii. p. 399 (1873); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 235 (1884); Seebohm, Brit. Birds, iii. p. 326. pl. 51 (1885); id. Eggs of Brit. Birds, p. 110, pl. 33, figs. 1, 2 (1896); Saunders, Cat. Birds B. M. xxv. p. 260 (1896); Sharpe, Hand-l. i. p. 141 (1899).

Laroides argentatus, Buedeker, Eier Eur. Vög. tab. 40. fig. 1 (1855-63).

The eggs of the Herring Gull present nearly all the types of coloration to be found among the eggs of L. fuscus, but they are, as a body, rather larger. They measure from 2.55 to 3 in length, and from 1.75 to 2.1 in breadth.

N. America (Smiths, Inst.). Salvin-Godman Coll. 2. Hudson's Bay (C. Drevler: Henshaw Salvin-Godman Coll.

l. Selkirk Settlement (D. Gunn: Salvin-Godman Coll. Henshaw Coll.).

1. Copinsha, Orkneys (Hargitt Coll.). 13.

Massachusetts (T. M. Brewer). Salvin-Godman Coll. Seebohm Cell.

Saltee Islands, Ireland, 27th May Seebohm Coll. 3. Breachy, Donegal, 14th May. Saunders Coll. 3. Farn Islands, June (H. Serbohm). Seebohm Coll. 8.

1. Farn Islands (H. Seebohm). Seebohm Coll.

Seebohm Coll.

Montagu Coll.

Saunders Coll.

Saunders Coll.

Seebohm Coll.

Seebohm Coll.

W. Rooke, Esq. [P.].

Salvin-Godman Coll.

D. W. Mitchell, Esq. [P.].

Flamborough, Yorkshire (II.

Seebohm). Scarborough, Yorkshire. 1.

1. Pembroke.

Lundy Island, Bristol Channel, May 2.

Lulworth, Dorsetshire, 23rd April. 1.

Lulworth (F. Penrose).

3. Cornwall. 2. Tamsö, Finmark, 2nd June.

12. Danish Coast, North Sea (T. Holland).

2. Danish Coast, North Sea, 4th June Seebohm Coll. (T. H.).

# Larus cachinnans. Pall.

Larus cachinnans, Thien. Fortpflanz. ges. Vög. tab. xic. fig. 1, a-c (1845-54); Whitehead, Ibis, 1885, p. 46; Saunders, Cat. Birds B. M. xxv. p. 266 (1896); Grant, Ibis, 1896, p. 47; Sharpe, Hand-l. i. p. 141 (1899).

Laroides michahellesii, Baedeker, Eier Eur, Voq. tab. 79, fig. 2

(1855-63).

Larus argentatus (nee Gm.), Godman, Ibis, 1866, p. 103.

Larus leucophæus, Saunders, Ibis, 1871, p. 400; Dresser, Birds Eur. viii. p. 411 (1873).

The eggs of the Yellow-legged Herring Gull in the Collection are fairly uniform in coloration and resemble the commoner type of egg of L. argentatus, the ground-colour being buff, marked distinctly and evenly all over with spots and moderately-sized blotches of various shades of brown and underlying pale purple. A few examples are much paler than the average, the ground being of a cream-colour, but marked in the usual manner. The eggs measure from 2.5 to 3.05 in length, and from 1.9 to 2 in breadth.

Flores, Azores (P. Godman).

Great Salvage Island, 24th April (C. Baring & W. R. Ogilvie Grant).

Spain.

Columbretes Island, Spain, May (R. Martin).

Corsica, 2nd May.

Straits of Bonifacio.

Echinades, Greece, 1st June. Greece, 3rd May (T. Krüper).

3. Delta of the Danube (Homeyer).

Dobrudscha, 9th June.

3. Lake Sinöe, Dobrudscha, 9th June (H. Seebohm).

Amoor, E. Siberia (G. Radde).

Salvin-Godman Coll.

Hon. C. Baring & Ogilvie Grant [P.].

Saunders Coll. Saunders Coll.

J. Whitehead, Esq. [C.].

Lord Lilford [P.]. Seebohm Coll.

Sannders Coll.

Seebohm Coll. Saunders Coll.

Seebohm Coll.

Salvin-Godman Coll.

# Larus audouini, Payr.

Larus audouini, Thien. Fortpflanz. ges. Vög. tab. lxxxviii. fig. 3 (1845-54); Bree, Birds Eur. 1st ed. iv. p. 92, pl. — (1807); 2nd ed. v. p. 62, pl. — (1876); Lilford, Ibis, 1875, p. 31; Dresser, Birds Eur. viii. p. 395 (1878); Saunders, Cat. Birds B. M. xxv. p. 271 (1896); Sharpe, Hand-l. i. p. 142 (1899).

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Three eggs of Audouin's Gull in the Collection have a buff ground and are pretty thickly spotted and blotched with blackish brown. A fourth is of a kind of creamy-buff tint, and the markings, which are similar in character to those on the other examples, are of a pale yellowish-brown colour. All four have the usual pale purple underlying markings. They measure respectively: 2.4 by 1.75; 2.45 by 1.73; 2.45 by 1.8; 2.53 by 1.66.

Columbretes Island, Spain.
 Columbretes Island, 1st May.
 Columbretes Island, April.
 Toro, Sardinia, 25th May (Lord
 Saunders Coll.
 Saunders Coll.
 Saunders Coll.

Lilford).

# Larus delawarensis, Ord.

(Plate XVII. fig. 5.)

Larus delawarensis, Baird, Brewer & Ridgw, Water Birds N. Am. ii. p. 244 (1884); Saunders, Cat. Birds B. M. xxv. p. 273 (1896); Sharpe, Hand-l. i. p. 142 (1899).

The two eggs of the Ring-billed Gull in the Collection are of quite dissimilar types. One is of a regular oval form and has an olive-buff ground, sparingly marked, except at the larger end, where there are huge confluent blotches forming an irregular zone, with spots and specks of deep chocolate-brown; the underlying pale purple markings are few and inconspicuous. The second specimen is a pointed oval and has a light buff ground, boldly marked all over with spots and blotches of blackish brown. The underlying markings on this egg are numerous, large and conspicuous. The two measure respectively: 2·25 by 1·63; 2·35 by 1·6.

 Little Slave Lake, Cauada (S. Jones: Salvin-Godman Coll. Henshaw Coll.).

1. North America.

Saunders Coll.

# Larus californicus, Lawr.

(Plate XVIII. fig. 2.)

Larus californicus, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 242 (1884); MacFarlane, Proc. U. S. Nat. Mus. xiv. p. 418 (1891); Saunders, Cat. Birds B. M. xxv. p. 276 (1896); Sharpe, Hand-l. i. p. 142 (1899).

The eggs of the California Gull in the Collection show considerable variation, but can all be matched by those of *L. fuscus*, and a larger series would, no doubt, display all the types to be found among the eggs of that species. They measure from 2.45 to 2.75 in length, and from 1.75 to 1.85 in breadth.

North America (Smiths, Inst.). Salvin-Godman Coll.
North America (T. M. Brewer). Saunders Coll.

North America (T. M. Brewer).
 North America, 16th May
 Saunders Coll.
 Saunders Coll.

(R. Ridgway).

1. Anderson River, Arctic America, Saunders Coll. 6th July (R. MacFarlane).

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Pyramid Lake, Nevada, 16th May Salvin-Godman Coll. (R. Ridgway: Henshaw Coll.).

5. Pyramid Lake, May (Henshaw Coll.). Salvin-Godman Coll.

Pyramid Lake, May (H. W. Hen- Saunders Coll. shaw).

#### Larus canus, Linn.

Larus canus, Thien. Fortpflanz. ges. Vög. tab. xc. fig. 3, a-f (1845-54); Buedeker, Eier Eur. Vög. tab. 39. fig. 3 (1855-63); Hewitson, Eggs of Brit. Birds, ii. p. 495, pl. exxxviii. (1856); Dresser, Birds Eur. viii. p. 381 (1873); Seebohm & Harvie-Brown, Ibis, 1876, p. 451; Seebohm, Ibis, 1879, p. 161; Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 250 (1884); Seebohm, Brit. Birds, iii. p. 316, pl. 52 (1885); id. Eggs of Brit. Birds, p. 109, pl. 34. figs. 5, 6 (1896); Saunders, Cat. Birds B. M. xxv. p. 277 (1896); Sharpe, Hond-l. i. p. 142 (1899).

The eggs of the Common Gull are not subject to any great variation in coloration. An occasional blue egg may be found. but the majority are much of one type. The ground varies between dark cream-colour and olive-buff and olive-brown. The surfacemarkings are dark brown, sometimes approaching black, and the underlying markings are grey or pale purple. In most examples the markings, consisting of spots and blotches, are pretty evenly distributed over the shell; in a few, the blotches are larger and collected together chiefly at the larger end. The eggs measure from 2.15 to 2.65 in length, and from 1.6 to 1.75 in breadth.

6. Damsa, Orkneys, 2nd June (C. Salvin-Godman Coll. Hubbard).

6. Copinsha, Orkneys (Hargitt Coll.). Seebohm Coll.

Sendaig Island, Inverness, 18th May Seebohm Coll. (E. Hargitt).

Sandaig Island, 18th May (E. II.). Seebohm Coll.

Sandaig Island, 18th May (E. H.). Seebohm Coll.

Sandaig Island, 18th May (E. II.). Seebohm Coll.

Sandaig Island, 18th May (E. H.). Sandaig Island, 18th May (E. H.). Seebohm Coll.

3. Seebohm Coll.

Sandaig Island, 18th May (E. H.). Seebohm Coll.

3. Sandaig Island, 18th May (E. H.). Seebohm Coll.

2. Sandaig Island, 18th May (E. H.). Seebohm Coll. 3.

Knockie, Inverness (E. H.). Seebohm Coll. 1. Seebohm Coll.

Knockie, 30th April (E. H.).

3. Knockie, 31st May (E. II.). Seebohm Coll.

2. Knockie, 31st May (E. II.) Seebohm Coll.

3. Knockie, 31st May (E. H.). Seebohm Coll.

2. Knockie, 31st May (E. H.). Seebohm Coll. 3. Knockie, 3rd May (Hargitt Coll.). Seebohm Coll.

2. Knockie, 3rd May (Hargitt Coll.). Seebohm Coll. 7. Knockie, 6th May (Hargitt Coll.). Seebohm Coll.

2.

Knockie (Hargitt Coll.). Seebohm Coll.

33. Knockie (Hargitt Coll.). Seebohm Coll.

3. Knockie (Hargitt Coll.). Seebohm Coll.

3. Knockie (Hargitt Coll.). Seebohm Coll.

Knockie (Hargitt Coll.). Seebohm Coll. 1.

Tamsö, Norway, 17th June. Seebohm Coll. Tromsö, Norway, 11th June.

3. Stockholmen, Smölen Islands, 29th May (R. B. S.).

Stockholmen, 29th May (R. B. S.). 3. 3. Stockholmen, 29th May (R. B. S.).

17. Stockholmen, 29th May (R. B. S.).

1. Sweden.

2. Denmark, 15th June.

1. Rugen, Baltic, June (T. Holland). West Baltic, 8th June (T. II.).

2. R. Petchora, lat. 661° N., 15th June (H. Seebohm & J. A. Harvie-Brown).

1. Yenesei Valley, lat. 66 N., June (H. Seebohm).

Scebohm Coll.

Dr. R. Bowdler Sharpe [P.].

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Dr. R. Bowdler Sharpe [P.] Dr. R. Bowdler Sharpe [P.].

Dr. R. Bowdler Sharpe [P].

S. O. Sahlin, Esq. [P.]. Seebohm Coll.

Seehohm Coll. Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

# Larus brachyrhynchus, Richardson.

# (Plate XVII. fig. 1.)

Larus brachvrhynchus, Baird, Brewer & Ridgw, Water Birds N. Am. ii. p. 247 (1884); Nelson, Report Nat. Hist. Alaska, p. 54 (1887); MacFarlane, Proc. U. S. Nat. Mus. xiv. p. 418 (1891): Saunders, Cat. Birds B. M. xxv. p. 283 (1896); Sharpe, Hand-l. i. p. 142 (1899).

The eggs of the Short-billed Gull in the Collection are of a pointed oval form. One example has the ground of a pale greenish colour; another of a full buff colour; and two others of a greenish-grey colour. The markings, which consist of spots, small blotches and a few streaks, are of a chocolate or blackish-brown colour and are, in all cases, more dense at the large end, where they form a more or less broken cap or zone. Four specimens measure respectively: 2·12 by 1·56; 2·05 by 1·57; 2·21 by 1·5; 2·15 by 1·56.

N. America (Smiths, Inst.).

Salvin-Godman Coll.

Fort Yukon, Alaska (E. W. Nelson: Salvin-Godman Coll. Henshaw Coll.).

Fort Anderson, Arctic America (R. Saunders Coll. MacFarlane).

# Larus glaucescens, Naum.

Larus glaucescens, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 223 (1884); Nelson, Report Nat. Hist. Alaska, p. 53 (1887); Saunders, Cat. Birds B. M. xxv. p. 284 (1896); Sharpe, Hand-l. i. p. 142 (1899).

The eggs of the Glaucous-winged Gull are very uniform and resemble the common type of egg of L. argentatus. The groundcolour varies from pale creamy-buff to a pale buff, and this is evenly spotted and blotched all over with vellowish and chocolate-brown, sometimes approaching black, and underlying pale purple. A few have, in addition to the normal markings, some lines and scrawls. The eggs measure from 2.75 to 3.05 in length, and from 1.86 to 2 in breadth.

North America.

:).

Chica Rocks, Alaska, 27th June (Dall).

Vancouver Island, 25th June (Dr. Lyall). Rosario Channel, Vancouver Island, ٠).

10th June (Dr. Luall).

Toporkoff Island, Bering Sea, 20th 2. June.

Toporkoff Island, 12th July.

Islands off San Francisco (J. Hepburn).

Purchased.

Saunders Coli.

Vov. H.M.S. 'Plumper.'

Vov. II.M.S. 'Plumper.'

G. E. H. Barrett-Hamilton,

Esq. [P.]. G. E. H. Barrett-Hamilton, Esq. [P.].

Salvin-Godman Coll.

## Larus glaucus, Fabr.

Larus glaucus, Thien. Fortpflanz. ges. Vög. tab. xci, fig. 1, a-d (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 504, pl. exli. fig. ii (1856); Dresser, Birds Eur. viii. p. 433 (1877): Feilden, Ibis, 1877, p. 409; id. in Nares's Narr. Voy. Polar Sea, p. 214 (1878); id. in Markham's Polar Reconn.' pp. 334, 339 (1881); Baird, Brewer & Kidyw.
Water Birds N. Am. ii. p. 211 (1884); Seebohm, Brit. Birds, iii.
p. 330, pl. 50 (1885); MacFarlane, Proc. U. S. Nat. Mus. xiv.
p. 417 (1891); Saunders, Cat. Birds B. M. xxv. p. 259 (1896); Seebohm, Eggs of Brit. Birds, p. 112, pl. 32. figs. 4, 5 (1896); Sharpe, Hand-l. i. p. 142 (1899).

Leucus glaucus, Baedeker, Eier Eur. Vög. tab. 39. fig. 1 (1855-63). Larus barrovianus, Nelson, Report Nat. Hist. Alaska, p. 51 (1887).

The eggs of the Glaucous Gull in the Collection, although not numerous, show quite an extensive variation. They are of a pointed oval form. A few are pale blue, marked very sparingly with blackish spots and here and there a blotch. Others are yellowish grey, marked with some brown spots and huge blotches. Others again form a remarkable type, quite unique among Gulls' eggs. The ground is of a pale pink and the whole shell is densely covered with streaks, clouds, and smears of brick-red and underlying pale purple. The common type of egg has the ground of an olive-grey or pale buff colour, and this is evenly marked all over with spots, lines, and small blotches of yellowish and dark chocolate-brown, and the usual underlying grey or pale purple. The eggs measure from 2.9 to 3.6 in length, and from 1.9 to 2.4 in breadth.

St. Michael's, Alaska, 16th June.

Cambridge Bay, Arctic America (Capt. Collinson). 1. Arctic Coast, east of Anderson River

(R. MacFarlane: Smiths, Inst.).

Greenland (E. Fenéker: Hargitt Coll.).

Greenland, May (E. F.: Hargitt Coll.).

Greenland, 1st June (E. F.: Hargitt Coll.).

1. Greenland (C. Hart).

3. Greenland. Salvin-Godman Coll.

Vov. H.M.S. 'Enterprise.'

Salvin-Godman Coll.

Seebohm Coll.

Seebohm Coll.

Seebohm Coll.

Voy. H.M.S. 'Discovery.' Gould Coll.

 1. Greenland.
 Saunders Coll.

 2. Iceland.
 Saunders Coll.

 1. Vardö, Finmark, June.
 Saunders Coll.

 8. Vardö (Nordvi).
 Seebohm Coll.

3. Spitsbergen (T. Holland). Seebohm Coll.

2. Nameless Bay, Novaya Zemlya, Admiral A. Markham [P.]. 15th June.

## Larus leucopterus, Faber.

Larus leucopterus, Thien. Fortpflanz. ges. Vög. tab. xci. fig. 2, a-h (1845-54); Hewitson, Eggs Brit. Birds, ii. p. 498, pl. cxxxix. figs. i, ii (1850); Dresser, Birds Eur. viii. p. 439 (1876); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 216 (1884); Seebohm, Brit. Birds, iii. p. 333, pl. 51 (1884); id. Eggs of Brit. Birds, p. 113, pl. 33. fig. 3 (1896); Saunders. Cat. Birds B.M. xxv. p. 295 (1896); Sharpe, Hand-t. i. p. 142 (1899).

Leucus leucopterus, Baedeker, Eier Eur. Vög. tab. 39. fig. 2 (1855-63).

The eggs of the Iceland Gull appear to be fairly uniform in coloration. The ground-colour varies from a greenish grey to a pale buff and this is marked, in most eggs evenly all over, in a few more densely at the larger end than elsewhere, with spots and blotches of chocolate and dark blackish brown and underlying pale purple. Specimens vary from 2.5 to 2.75 in length, and from 1.75 to 2 in breadth.

3. Cambridge Bay, Arctic America Voy. H.M.S. 'Enterprise.' (Capt. Collinson).

Greenland.
 Greenland, 18th June (Ellingren).
 Geebohm Coll.

3. Greenland, May (E. Fenéker: Hargitt Seebohm Coll.

Greenland, 28th May.
 Greenland, 14th May (R. Müller).
 Greenland.
 Seebohm Coll.
 Saunders Coll.
 Sannders Coll.

2. Iceland (J. H. Dunn; Hargitt Coll.). Seebohm Coll.

# Genus GABIANUS, Bruch.

# Gabianus pacificus (Lath.).

Larus pacificus, Thien. Fortpflanz. ges. Vög. tab. xic. fiz. 3 (1845-54);
Gould, Handb. Birds Austr. ii. p. 385 (1865); Campbell, Nests & Eggs Austr. Birds, p. 65 (1883); North, Nests & Eggs Austr. Birds, p. 351, pl. xx. fig. 1 (1889); Le Souëf, Ibis, 1895, p. 421.
Gabianus pacificus, Saunders, Cat. Birds B. M. xxv. p. 297 (1896); Sharpe, Hand-l. i. p. 143 (1899).

The eggs of the Pacific Gull in the Collection are pointed ovals, olive-buff in colour, marked with spots and blotches of dark chocolate-brown and underlying pale purple. In two specimens, the markings are small and evenly spread over the shell; in the third they consist of some spots and small blotches and in

222 LARIDÆ.

addition a few huge smears. One egg is fractured, and cannot be measured. The other two measure respectively 2.8 by 1.97; 2.83 by 1.95.

3. Tasmania.

Gould Coll.

#### Genus LEUCOPHÆUS, Bruch.

# Leucophæus scoresbyi (Traill).

(Plate XVIII. fig. 1.)

Larus scoresbii, Abbott, Ibis, 1861, p. 165. Leucophieus scoresbii, Saunders, Cat. Birds B. M. xxv. p. 299 (1896). Leucophieus scoresbyi, Sharpe, Hand-l. i. p. 143 (1899).

The eggs of the Red-billed Gull in the Collection vary in shape from broad to elongated oval. The ground is of an olive-buff colour, and this is marked evenly all over with spots and blotches of yellowish and chocolate-brown and underlying pale purple. They measure respectively: 2-3 by 1-7; 2-35 by 1-6; 2-46 by 1-65; 2-3 by 1-75.

Falkland Islands (C. C. Abhott).
 Falkland Islands (Dr. Deane).

Gould Coll. Saunders Coll.

## Genus PAGOPHILA, Kaup.

# Pagophila eburnea (Phipps).

Larus eburneus, Thien. Fortpflanz, ges. Vog. tab. xc. fig. 2, a-c (1845-54); Seebohm, Brit. Birds, iii. p. 337, pl. 50 (1885); Collett, Ibis, 1888, p. 440, pl. xiii.; Seebohm, Eggs of Brit. Birds, p. 115, pl. 32, fig. 3 (1896).

Pagophila eburnea, Dresser, Birds Eur. viii. p. 349 (1877); Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 198 (1884); Sounders, Cat. Birds B. M. xxv. p. 301 (1896); Sharpe, Hand-l. i. p. 143 (1899).

The eggs of the Ivory Gull in the Collection are of a broad oval form, pointed at the smaller end. Three are of a pale stone-colour, rather sparingly marked with dark brown of various shades and numerous conspicuous blotches of pale inky-purple. Two others have the ground buff, and they are boldly marked with spots and rather large blotches of deep brown, but the underlying markings of pale purple are less conspicuous than in the other eggs. Five examples measure from 2:15 to 2:36 in length, and from 1:63 to 1:75 in breadth.

1. Northern Europe.

Old Collection. Seebohm Coll.

 Spitsbergen, Aug. (Foscie).
 Cape Mary Harmsworth, Franz Josef Land, 7th Aug.

F. G. Jackson, Esq. [P.].

## Genus RISSA, Stephens.

# Rissa rissa (Linn.).

Larus tridactylus, Thien. Fortpflanz. ges. Vög. tab. xc. fig. 1, a-h (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 493, pl. exxxvii. (1856); Dixon, Ibis, 1885, p. 87; Seebohm, Brit. Birds, iii. p. 340, pl. 50 (1885); id. Eggs of Brit. Birds, p. 114, pl. 32. figs. 1, 2 (1896); id. Birds Japan. Emp. p. 294 (1890).

Rissa tridactyla, Baedeker, Eier Eur. Vog. tab. 40, fig. 2 (1855-63); Dresser, Birds Eur. viii. p. 447 (1878); Baird, Brewer & Ridge, Water Birds N. Am. ii. p. 202 (1884); Saunders, Cat. Birds B. M.

xxv. p. 305 (1896).

Rissa tridactyla pollicaris, Nelson, Report Nat. Hist. Aluska, p. 49 (1887).

Rissa rissa, Sharpe, Hand-l. i. p. 143 (1899).

The eggs of the Kittiwake are of a pointed oval form and are most varied in their coloration. The ground ranges from creamcolour to pinkish buff, and from olive-grey to olive-brown. The
surface markings are of rich chocolate-brown, reddish brown or
yellowish brown, and the underlying markings, which are extremely
conspicuous in many eggs, are grey or pale purple. The markings
on some specimens are very small, on others large, consisting of
huge bletches. Sometimes the markings are evenly distributed
over the shell; at others they are chiefly collected together at the
large end to form a cap or zone. A few eggs are covered with a
beautiful tangled network of lines; in fact the patterns on the
Kittiwakes' eggs are infinite in number, and it is difficult to get
half-a-dozen examples to match each other. They measure from
2·1 to 2·4 in length, and from 1·5 to 1·75 in breadth.

- St. George's Island, Bering Sea, Salvin-Godman Coll, 24th June (H. W. Elliott: Henshaw Coll.)
- 3. Kurile Islands, Japan (H. J. Snow). Seebohm Coll.
- North Iceland, 6th June (C. Seebohm Coll. Steinéke: Hargitt Coll.).
- 3. North Iceland, 6th June (C. S.: Seebhom Coll. Hargitt Coll.).
- Faröe Islands, 30th May (H. C. Seebohm Coll. Müller: Hargitt Coll.).
- Faröe Islands, 6th June (H. C. M.: Seebohm Coll. Hargitt Coll.).
- 2. Fair Island, Orkneys. E. M. Nelson, Esq. [P.]. 16. St. Kilda, Hebrides, 14th June Seebohm Coll.
- St. Kilda, Hebrides, 14th June Seebohm Coll. (C. Divon).
   Bass Rock, Firth of Forth (Hargitt Seebohm Coll.
- Coll.).
- Rathlin Island, Ireland.
   South Saltees, Ireland, 16th June
   Seebohm Coll.
- (R. J. Ussher).
  2. South Saltees, 16th June (R. J. U.). Seebohm Coll.
- 2. South Saltees, 16th June (R. J. U.). Seebohm Coll.
  13. Farn Islands, June (H. Seebohm). Seebohm Coll.
- Farn Islands, June (H. Seebohm). Seebohm Coll.
   The Pinacles, Farn Islands, June Seebohm Coll. (O. Salvin).

3. Scarborough.

Flamborough (Hargitt Coll.).

Flamborough (H. Scebohm). 9.

Lundy Island, Bristol Chanuel, June.

Stappen, Norway, 17th June. 1.

Sværholt, Finmark, 16th June.

W. Rooke, Esq. [P.].

Seebohm Coll. Seebohm Coll.

Saunders Coll.

Seebohm Coll. Seebohm Coll.

#### Rissa brevirostris (Bruch).

(Plate XVII. fig. 3.)

Larus brevirostris, Elliott, Rep. Prybiloff Isl., Birds, no. 553 (1873); id. Mon. Seal Islands, Alaska, p. 133 (1882).

Rissa brevirostris, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 207 (1884); Saunders, Cat. Birds B. M. xxv. p. 312 (1896); Sharpe, Hand-l. i. p. 143 (1899).

The five eggs of the Red-legged Kittiwake in the Collection are quite inseparable from many of the pale or cream-coloured eggs of R. rissa. They measure from 2.16 to 2.32 in length, and from 1.5 to 1.63 in breadth.

Aleutian Islands (Smiths, Inst.).

St. George's Island, Bering Sea, 24th June (Henshaw Coll.).

St. George's Island, June (H. W. Elliott: Henshaw Coll.).

Saunders Coll.

Salvin-Godman Coll.

Salvin-Godman Coll.

# Family STERCORARIIDÆ.

Genus MEGALESTRIS,  $B_P$ .

# Megalestris catarrhactes (Linn.).

Lestris catarrhactes, Thien. Fortpflanz. ges. Vög. tab. lxxxvi. fig. 1, a-d (1845-54); Hewitson, Eggs of Brit. Birds, ii. p. 505, pl. clxii. (1856). Catarracta skua, Buedeker, Eier Eur. Vög. tab. 64. fig. 4 (1855-63).

Stercorarius catarrhactes, Dresser, Birds Eur. viii. p. 457 (1875); Secbohm, Brit. Birds, iii. p. 346, pl. 55 (1885); id. Eggs of Brit. Birds, p. 118, pl. 37, figs. 3, 4 (1896).

Megalestris skua, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 328 (1884).

Megalestris catarrhactes, Saunders, Cat. Birds B. M. xxv. p. 315 (1896); Sharpe, Hand-l. i. p. 143 (1899).

The eggs of the Great Skua are for the most part somewhat elongated pointed ovals, but a few are broad ovals and others elliptical. They vary considerably in coloration. A small proportion are of a pale bluish white, obsoletely marked with some underlying pale purple blotches. In the majority the ground is greyish buff, yellowish grey olive-buff and olive-brown. The markings consist of spots and blotches, and while in some eggs they are evenly distributed over the shell, in others they show a tendency to collect at the large end. The

surface-markings are yellowish brown or dark brown of various shades, sometimes approaching black. The underlying markings are grey or pale purple and rather inconspicuous. The eggs measure from 2.4 to 3 in length, and from 1.75 to 2 in breadth.

me	easure from 2.4 to 5 in length, and in	rom 1.79 to 2 in preadu
5. 2.	Iceland ( <i>Hargitt Coll.</i> ). North Iceland ( <i>C. Steinéke : Hargitt</i>	Seebohm Coll. Seebohm Coll.
	Coll.).	Beebonn Con.
2.	N. Iceland (C. S.: Hargitt Coll.).	Seebohm Coll.
2.	N. Iceland (C. S.: Hargitt Coll.).	Seebohm Coll.
2.	N. Iceland (C. S.: Hargitt Coll.)	Seebohm Coll.
3.	N. Iceland (C. S.: Hargitt Coll.).	Seebohm Coll.
$\frac{4}{2}$ .	Farie Islands,	E. Hargitt, Esq. [P.].
2.	Farie Islands (H. C. Müller).	Saunders Coll. Saunders Coll.
۷.	Faröe Islands, 22nd May (H. W. Feilden).	Saunders Con.
3.	Faröe Islands.	Seebohm Coll.
6.	Faröe Islands (Hargitt Coll.).	Seebohm Coll.
6.	Faröe Islands, Ist-9th June (H. C.M.:	Seebohm Coll.
3.	Hargitt Coll.). Faröe Islands (H. C. M.: Hargitt	Seebohm Coll.
2.	Coll.). Faröe Islands (H. C. M.: Hargitt	Seebohm Coll.
2.	Coll.). Faröe Islands (H. C. M.: Hargitt	Seebohm Coll.
	Coll.).	
2.	Faröe Islands (H. C. M.: Hargitt	Seebohm Coll.
2.	Coll.). Faröe Islands (H. C. M.: Hargitt	Seebohm Coll.
2.	Coll.). Wideroe, Faröe Islands (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	cccsoniii con.
2.	Faroe Islands, 30th May (H. C. M.: Hargitt Coll.).	Seebohm Coll.
2.	Faroe Islands, 1st June (H. C. M.:	Seebohm Coll.
(3	Hargitt Coll.).	
2.	Faröe Islands, 1st June (H. C. M.: Hargitt Coll.).	Seebohm Coll.
2.	Faroe Islands, 4th June (H. C. M.:	Seebohm Coll.
	Hargitt Coll.).	
2.	Faröe Islands, 6th June (H. C. M.:	Seebohm Coll.
2.	Hargitt Coll.). Faröe Islands, 26th June (H. C. M.:	Seebohm Coll.
ú.	Hargitt Coll.).	Scenoum Con.
2.	Foula, Shetlands, June (Umfray).	Saunders Coll.
2.	Foula, 25th May (J. Harcus).	Hereford Museum [E.].

# Megalestris chilensis, $B_{P}$ .

Salvin-Godman Coll. Seebolun Coll.

Unst, Shetlands (A. Newton).

Orkney Islands (W. Dunn).

Megalestris chilensis, Saunders, Cat. Birds B. M. xxv. p. 318 (1896) Sharpe, Hand-l. i. p. 144 (1899).

The sole egg of the Chilian Skua in the Collection is a pointed oval and inseparable from many of the eggs of the Great Skua.

The ground is of a greyish-buff colour, and this is spotted and blotched with pale yellowish brown and underlying pale purple. It measures 2.9 by 2.05.

 Sea Lion Island, River Sta. Crnz, Saunders Coll. Patagonia, 3rd Dec. (J. M. C.).

## Megalestris antarctica (Less.).

(Plate XVIII, fig. 5.)

Megalestris antarctica Gould, P. Z. S. 1859, p. 98; Saunders, Cat. Birds B. M. xxv. p. 319 (1896); Sharpe, Hand-l. i. p. 144 (1899); Hall, Ibis, 1900, p. 8.

Lestris antarctica, Abbott, Ibis, 1861, p. 165. Lestris catarractes, Travers, Trans. New Zeal. Inst. v. p. 218 (1872).

Stercorarius antarcticus, Sharpe, Phil. Trans. 168. p. 109 (1879); Saunders, Zool. Challenger Exped. ii. pt. viii. p. 139 (1880); Sclater, t. c. p. 151 (1880); Buller, Birds New Zeal. 2nd ed. ii. p. 63 (1888).

The eggs of the Southern Skua are not distinguishable from the eggs of the Great Skua. Those in the Collection measure from 2.6 to 3.05 in length, and from 1.95 to 2.2 in breadth.

Falkland Islands.

2. Falkland 1slands (C. C. Abbott).

4. Nightingale Island, Tristan d'Acunha, Oct.

1. Crozet Islands (E. L. Layard).

1. Crozet Islands (Capt. Armson). Kerguelen Island (A. E. Eaton). Voy. H.M.S. 'Challenger.' Salvin-Godman Coll.

Voy. II.M.S. 'Challenger.'

E. L. Layard, Esq. [P.]. Saunders Coll.

Royal Society [P.].

# Megalestris maccormicki (Saunders).

Megalestris maccormicki, Saunders, Cat. Birds B. M. xxv. p. 321 (1896); Sharpe, Hand-l, i. p. 144 (1899). Lestris, Borchgr. Geogr. Journ. xvi. p. 403 (1900).

The eggs of McCormick's Skua are quite of the same type as those of M. catarrhactes and M. antarctica, and as variable in coloration. The series contains, however, three specimens which are abnormal in colour, the ground being a clear greenish blue, sparingly marked at the large end only with a few smears and blotches of yellowish brown. Twenty-six examples measure from 2.58 to 3.1 in length and from I.SS to 2.05 in breadth. Judging from the numbers recorded on the eggs, they all appear to have been taken in pairs.

26. Cape Adare, Antarctic Ocean ('Southern Cross' Exped.).

Sir George Newnes, Bart., M.P. [P.].

# Genus STERCORARIUS, Briss.

# Stercorarius crepidatus (Banks).

Lestris parasiticus, Thien. Fortyflanz. ges. Voy. tab. lxxxvi. fig. 3, a-f (1845-54); Buedeker, Eier Eur. Vög. tab. 64. fig. 2 (1855-63).

Lestris richardsonii, Hewitson, Egys of British Birds, ii. p. 509, pl. exliii. fig. ii (1856).

Stereorarius erepidatus, Dresser, Birds Eur. viii. p. 471 (1876); Seebohm & Harvie Brown, Ibis, 1876, p. 453; Feilden in Markham's Polar Reconn. pp. 335, 339 (1881); Saunders, Cat. Birds B. M. xxv. p. 327 (1896); Sharpe, Hand-l. i. p. 144 (1899).

Stereorarius richardsoni, Scebohm, Brit. Birds, iii. p. 353, pl. 55 (1885);

id. Eggs of Brit. Birds, p. 116, pl. 37, figs. 1, 2 (1896).

The eggs of Richardson's Skua are of a pointed oval form, sometimes broad and at other times lengthened and narrow. The groundcolour varies from greenish grey to dark olive and russet-brown. The markings consist of spots, blotches and smears, and are of a yellowish brown or brown of various shades, sometimes approaching black. The underlying markings are seldom conspicuous, and are of a pale purple colour. The markings of both kinds are generally evenly distributed over the shell, but in many cases they are collected chiefly at the larger end, where they form an irregular cap or zone. The eggs measure from 2 to 2.5 in length, and from 1.47 to 1.7 in breadth.

Hudson's Bay. Gould Coll. Greenland. Gould Coll. 3. Greenland (E. Whymper). Saunders Coll. Greenland. 1. Greenland (E. Fenéker: Hargitt Seebohm Coll. Greenland, June (E. F.: Hargitt Seebohm Coll. 2. South Greenland (II. Hawkins). Seebohm Coll. 3. Stremöe, Faröe İslands (H. W.

Feilden). 1. Faröe Islands (H. C. Müller). 13.

Faröe Islands (H. C. M.: Hargitt Coll.).

Faroe Islands, 3rd June (H. C. M.: Seebohm Coll. Hargitt Coll.). Faröe Islands, 5th June (H. C. M.). 3.

5. Faröe Islands.

I. Faroe Islands (Hargitt Coll.). 1. Faroe Islands (Hargitt Coll.).

1. Shetlands (A. Dunn). Shetlands (W. Proctor). 1.

Unst, Shetlands (A. Newton). Island of Noss, Shetlands, 10th-

14th July (H. Saunders). 3. Shetlands, 1st July.

Hoy, Orkneys (C. Hubbard). Lundegode, Finnark, 7th Oct. 1.

Saunders Coll.

Saunders Coll.

Saunders Coll. Seebohm Coll.

Seebohm Coll. Seebohm Coll.

Seebohm Coll. Seebohm Coll. Gould Coll.

Saunders Coll. Salvin-Godman Coll. Saunders Coll.

Dr. A. Günther [P.]. Salvin-Godman Coll. Salvin-Godman Coll.

Q 2

Naesseby, Finmark (Nordvi). Seebohm Coll.

3. R. Petchora, 4th Aug. (H. Seebohm Seebohm Coll. & J. A. Harvie-Brown).

 Berg Island, Novaya Zemlya, 5th Admiral A. Markham [P.]. July.

## Stercorarius parasiticus (Linn.).

Lestris cephus, Thien. Fortpflanz. ges. Vöy. tab. lxxxvi. fig. 4, a-d (1845-54).

Lestris crepidatus, Baedeker, Eier Eur. Vög. tab. 64. fig. 3 (1855–63). Lestris buffonii, Hewitson, Egys of Brit. Birds, ii. p. 508, pl. cxliii. fig. i

(1856).
Stercorarius parasiticus, Dresser, Birds Eur. viii. p. 481 (1870); Feilden in Nares's Narr. Voy. Polar Sea, ii. p. 214 (1878); Saunders. Cat.

Mares S Marr. 1 off. Potar Sea, 11, p. 214 (1878); Saumers. Cat. Birds B. M. xxv. p. 334 (1896); Sharpe, Hand-l. i. p. 144 (1899).
Stereorarius longicaudatus, Feilden, His, 1877, p. 409.

Stercorarius longicaudus, Baird, Brewer & Ridgw. Water Birds N. Am. ii. p. 339 (1884).

Stercorarius buffoni, Seebohm, Brit. Birds, iii. p. 358, pl. 55 (1885): id. Eggs of Brit. Birds. p. 117, pl. 37. fig. 5 (1896).

The eggs of Buffon's Skua are very similar to those of Richardson's Skua, but are, on the whole, rather smaller. They measure from 1.95 to 2.25 in length, and from 1.45 to 1.6 in breadth.

 Dumb-bell Harbour, N. Lat. 82½°, Voy. H.M.S. 'Alert.' 18th July (H. W. Feilden).

 Floeberg Beach, N. Lat. 82° 27′. Voy. 11.M.S. 'Alert.' 7th June (H. W. F.).

11. Discovery Bay (C. Hart). Voy. H.M.S. 'Discovery.'

 Greenland, 3rd June (É. Fenéker: Seebohm Coll. Hargitt Coll.).

. Lapland, 20th June. Saunders Coll.

1 Kautokeino, Lapland, 20th June. Seebohm Coll. 2. Quickiock, Lapland. Saunders Coll.

2. Alten, Lapland, June (W. Meres). Seebohm Coll.

Alten, 21st June (W. Meves).
 Naesseby, Finmark (Nordvi).
 Seebohm Coll.

## APPENDIX.

Page 10. Add:-

# Tinamus solitarius (Vieill.).

Tinamus solitarius, Salvadori, Cat. Birds B. M. xxvii. p. 501 (1895); Sharpe, Hand-l. i. p. 8 (1899).

The egg of the Solitary Tinamou in the Collection is of the same blue colour as the eggs of the other Tinamous of this genus, but is of a blunt oval shape. It measures 2.55 by 1.88.

1. Rio de Janeiro.

Alexander Fry, Esq. [P.].

Page 11. Add:-

# Crypturus obsoletus (Temm.).

Crypturus obsoletus, Euler, J. f. O. 1867, p, 418; Sel. & Huds. Argent. Orn. ii. p. 207 (1889); Salvadori, Cat. Birds B. M. xxvii. p. 519 (1895); Sharpe, Hand-l. i. p. 9 (1899).

The egg of the Brown Tinamou in the Collection is of a somewhat lengthened oval form, and thus differs from the eggs of the other species of this genus. It is of a pinkish stone-colour, and measures 2 by 1.37.

Brazil.

Spencer Moore, Esq. [P.].

Page 40. Add:

## Pternistes infuscatus, Cab.

Pternistes infuscatus, Ogilvie Grant, Cat. Birds B. M. xxvi. p. 182 (1893); Sharpe, Hand-l. i. p. 26 (1899).

The eggs of Cabanis's Bare-throated Francolin in the Collection are of a broad, pointed oval shape, slightly rough to the touch, and with a small amount of gloss. They are of a light reddish-buff colour, and they are sprinkled all over with whitish streaks, apparently caused by the disintegration of the shell. Four examples measure respectively: 1.66 by 1.3; 1.65 by 1.3; 1.64 by 1.35; 1.63 by 1.31.

 Fort Smith, Kikuyu, Brit. East Africa, 6400 feet, 17th Sept.
 Richard Crawshay, Esq. [P.]. 230 APPENDIX.

Page 49. Add:-

#### Bambusicola thoracica.

Bambusicola thoracica, La Touche, Ibis, 1900, p. 51.

Three examples presented by Mr. Rickett resemble those already described, but are rather more distinctly marked with rufous specks. They measure respectively: 1.26 by .98; 1.2 by .95; 1.25 bv 1.

3. Kuatun, N.W. Fokien, May (J. D. D. La Touche).

C. B. Rickett, Esq. [P.].

Page 84. Add:-

## Genus THORACOTRERON, Salvad.

# Thoracotreron strophium (Gould).

Ptilopus strophium, Salvadori, Cat. Birds B. M. xxi. p. 135 (1893) Thoracotreron strophium, Sharpe, Hand-l. i. p. 60 (1899).

The eggs of the White-banded Fruit-Pigeon are white and glossless. Five examples measure respectively: 1.38 by .86; 1.36 by ·94: 1·34 by ·93; 1·32 by ·9; 1·3 by ·91.

St. Aignan, Louisiade Archipelago. A. S. Meek, Esq. [C.]. A. S. Meek, Esq. [C.]. St. Aignan.

A. S. Meek, Esq. [C.]. A. S. Meek, Esq. [C.]. St. Aignan.

1. St. Aignan.

# Page 86. Add:-

# Myristicivora spilorrhoa.

4. St. Aignan, Louisiade Archipelago. A. S. Meek, Esq. [C.].

Page 97. Add:-

## Enopopelia humilis (Temm.).

Turtur humilis, La Touche, Ibis, 1892, p. 493; Salvadori, Cat. Birds B. M. xxi. p. 434 (1893). Onopopelia humilis, Sharpe, Hand-l. i. p. 79 (1899).

The eggs of the Chinese Red Turtle-Dove in the Collection are of a creamy-white colour and measure respectively: 1.04 by .79; 1.01 by .8.

2. Foochow, China, 6th June.

C. B. Rickett, Esq.

Page 98. Add:—

# Spilopelia chinensis.

Turtur chinensis, La Touche, Ibis, 1892, p. 493.

C. B. Rickett, Esq. [P.]. Foochow, China, April. C. B. Rickett, Esq. [P.].

Fooehow, 26th April. Fooehow, 16th May. C. B. Rickett, Esq. [P.].

C. B. Rickett, Esq. [P.]. 1. Foochow, 17th May.

Page 101. Add :--

# Chamæpelia passerina.

2. St. Vincent, W. Indies (Mrs. II. H. Salvin-Godman Coll. Smith).

Page 102. Add :--

# Genus PERISTERA, Swains.

# Peristera geoffroyi (Temm. & Knip).

Peristera geoffroyi, Salvadori, Cat. Birds B. M. xxi. p. 494 (1893); Sharpe, Hand-l. i. p. 82 (1899).

The eggs of Geoffroy's Dove in the Collection have little or no gloss and measure respectively: 0.9 by 0.67; 0.92 by 0.67.

Rio de Janeiro.

Alexander Fry, Esq. [P.].

Page 105. Add:—

# Leptoptila reichenbachi, Pelz.

Leptoptila reichenbachi, Salvadori, Cat. Birds B. M. xxi. p. 553 (1893); Sharpe, Hand-l. i. p. 86 (1899).

The eggs of Reichenbach's Dove in the Collection are ereamywhite, glossy, and measure respectively: 1·17 by ·91; 1·25 by ·93.

2. Brazil

Spencer Moore, Esq. [P.].

Page 114. Add :-

# Aramides saracura (Spiv).

Aramides saracura, Sharpe, Cat. Birds B. M. xxiii. p. 61 (1894); id. Hand-l. i. p. 98 (1899).

The egg of the Plumbeous Rail contained in the Collection is of a regular oval form. It closely resembles the eggs of A. albiventris and A. ypacaha and measures 2.2 by 1.52.

1. Brazil

Spencer Moore, Esq. [P.].

Page 120. Add:-

# Limnobænus fuscus.

The examples presented by Mr. Rickett are very similar to the egg already described. They measure respectively: 1·15 by ·85; 1.2 by .9; 1.2 by .9; 1.19 by .89; 1.13 by .9.

5. Foochow, China, June.

C. B. Rickett, Esq. [P.].

232 APPENDIX.

Page 121. Add:-

## Amaurornis phænicura.

3. Foochow, China, 7th May.

C. B. Rickett, Esq. [P.].

Page 124. Add:-

Gallinula galeata.

Brazil.

Spencer Moore, Esq. [P.].

Page 125. Add :-

Gallicrex cinerea.

1. Foochow, China, 4th June.

C. B. Rickett, Esq. [P.].

1. Foochow, 23rd Aug.

C. B. Rickett, Esq. [P.].

Page 143. Add:-

Pygoscelis papua.

2. Falkland Islands.

Purchased.

Page 144. Add :-

Pygoscelis adeliæ (Hombr. & Jacq.).

Pygoscelis adeliæ, Ogilvie Grant, Cat. Birds B. M. xxvi. p. 632 (1898); Sharpe, Hand-l. i. p. 118 (1899).

Eudyptes adeliæ, Borchgr. Geogr. Journ. xvi. pp. 391, 402 (1900).

The eggs of the Adelia-Land Penguin vary greatly in shape. Some are of a regular oval form, some elliptical, and others nearly spherical. They are of a greenish-white or pale green colour. The largest example in the Collection measures 3·2 by 2·3, and the smallest 2·4 by 2·25. The eggs taken by the 'Southern Cross' Expedition were found in pairs, and each pair is marked with a separate serial number.

28. Cape Adare, Antarctic Ocean ('Southern Cross' Exped.).

Sir George Newnes, Bart., M.P. [P.].

Page 144. Add:—

Catarrhactes chrysocome.

2. Falkland Islands.

Purchased.

Page 144. Add:—

Catarrhactes chrysolophus.

2. Falkland Islands.

Purchased.

Page 157. Add:—

## Genus PAGODROMA, Bp.

## Pagodroma nivea (Gm.).

Pagodroma nivea, Moseley, Notes Nat. 'Challenger,' p. 253 (1879); Scl. Ibis, 1894, p. 498; Salvin, Cat. Birds B. M. xxv. p. 419 (1896); Sharpe, Hand-l. i. p. 127 (1899); Borchgr. Geogr. Journ. xvi. pp. 393, 403 (1900).

The eggs of the Snowy Petrel vary from a pointed to a blunt oval shape and sometimes they are quite elliptical. They are white and quite devoid of all gloss. The shell is slightly rough. Ten examples measure from 1.98 to 2.35 in length, and from 1.35 to 1.67 in breadth.

 Duke of York Island, Antarctic Ocean ('Southern Cross' Exped.).
 Sir George Newnes, Bart., M.P. [P.].

Page 157. Add:-

#### Bulweria bulweri.

 Island off the coast of China, near C. B. Rickett, Esq. [P.]. Foochow, July.

Page 161. Add:-

## Pelecanoides urinatrix.

2. Falkland Islands.

Purchased.

Page 163. Add:-

## Diomedea melanophrys.

2. Falkland Islands.

Purchased.

Page 167. Add:—

#### Uria troile.

4. Pembrokeshire.

Miss L. L. Salmon [P.].

Page 182. Add:-

#### Sterna hirundinacea.

Falkland Islands.

Purchased.

Page 190. Add:-

#### Sterna anæstheta.

8 Island off the coast of China, near C. B. Rickett, Esq. [P.]. Foochow, July.

234 APPENDIX.

Page 212. Add:—

# Larus dominicanus.

4. Falkland Islands. Purchased.

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# EXPLANATION OF THE PLATES.

### PLATE I.

- Fig. 1. Egg of Tinamus robustus.
  - 2. , Crypturus cinnamomeus.
  - 3. , Nothoprocta perdicaria.
  - 4. , Calopezus elegans.
  - 5. ,, Tinamotis pentlandi.

## PLATE II.

- Figs. 1 & 2. Eggs of Ammoperdix bonhami.
- Fig. 3. Egg of Lyrurus młokosiewiczi.
  - 4. ., Francolinus chinensis.
    - 5. ,, ,, pictus.
      - 6. ,, pondicerianus.
      - 7. ., Tetraogallus tibetanus.
      - S. ,. altaicus.

## PLATE III.

- Fig. 1. Egg of Perdicula asiatica.
  - 2. " Melanoperdic nigra.
  - 3. ., Arboricola crudigularis.
  - 4. .. Microperdix erythrorhyncha.
  - 5. ,, Arboricola torqueola.
  - 6. ., Rollulus roulroul.
  - 7. .. Francolinus gularis.
  - 5. .. sharpei.
  - 9. ., hicalcaratus.

## PLATE IV.

- Fig. 1. Egg of Synæcus raalteni.
  - 2. ,, Excalfactoria lineata.
    - 3. .. Bambusicola sonorivox.
    - 4. , Galloperdix spadicea.
    - 5. , Bambusicola thoracica.
    - 6. , Coturnix novæ-zealandiæ.
    - 7. ,, Ithagenes geoffrogi.
    - 8. " Bambusicola fytchei.
    - 9. , Galloperdix lunulata.

### PLATE V.

- Fig. 1. Egg of Lophura nobilis.
  - 2. , Lobiophasis bulweri.
  - 3. ., Lophura rufa.
  - 4. " Crossoptilum tibetanum.
  - 5. " Tragopan blythi.

## PLATE VI.

- Fig. 1. Egg of Phasianus versicolor.
  - 2. , Calophasis ellioti.
  - 3. ,, Phasianus scintillans.
  - 4. . . Argusianus grayi.
  - 5. ., Gennaus lineatus.
  - 6. , Chrysolophus amherstia.

## PLATE VII.

- Fig. 1. Egg of Aeryllium vulturinum.
  - 2. ,, Numida coronata.
  - 3. ., Oreortyx pictus.
  - 4, 5. ,, Eupsychortyw leucopogon.
  - 6. " Agriocharis ocellata.
    - 7 ,, Dendrorty& leucophrys.
  - 8. .. Gallus lafayettei.

#### PLATE VIII.

- Fig. 1. Egg of Geotryyon montana.
  - 2, 3. , Chalcophaps indica.
  - 4. " Turnix fasciata.
  - 5, 10. " Pteroclidarus namaquus.
  - 6, 9. , Turnix powelli.
  - 7. ,, ,, velox.
  - 8. ., ,, lepurana.
  - 11. , Pteroclidurus alchatus.
  - 12. , Turnix pyrrhothorax.
  - 13. .. Syrrhaptes tibetanus.

## PLATE IX.

- Fig. 1. Egg of Rallus virginianus,
  - 2. ,, Porzana carolina.
  - 3. ., Gallinula galeata.
  - 4. , Rallus antarcticus.
  - 5. , Amaurornis phanicura.
  - 6. ,, Pareudiastes parificus.
  - 7. ,, Porphyriornis nesiotis.
  - 8. , Creciscus jamaieensis.
  - 9. , Aramides albiventris.

## PLATE X.

- Fig. 1. Egg of Creciscus cayenneusis.
  - 2. ,, ,, albigularis.
  - 3. ,, Porphyrio poliocephalus.
  - 4. ,, Porphyriops melanops.
  - 5. ,, Fulica leucoptera.
  - 6. , Gallierex einerea.
  - 7. , Fulica rufifrons.
  - S. ,, armillata.

## PLATE XI.

- Fig. 1. Egg of Halocyptena microsoma.
  - 2. " Podicipes capensis.
    - 3. .. Oceanodroma melania.
    - 4. ,, eastro.
    - 5. .. Colymbus pacificus.
    - 6. , Oceanodroma socorroensis
    - 7. " Oceanites oceanica.
    - 8. , Podicipes americanus.
    - 9. .. Echmophorus major.

### PLATE XII.

- Fig. 1. Egg of Fregetta albiqularis.
  - 2. " " melanogaster.
  - 3. , Puffinus gelcouan.
  - 4. , subalaris.
  - 5. , Ptychorhamphus aleuticus
  - 6. , Pseuduria snowi.
  - 7. .. Simorhynchus pusillus.
  - 8. .. Pelecanoides garnoti.

### PLATE XIII.

- Fig. 1. Egg of Sterna albistriata.
  - 2. ., , vittata.
  - 3. ,. ,, virgata.
  - 4. " forsteri.
  - 5. ,, Hydrochelidon surinamensis
  - 6. "Sterna melanogaster.
  - 7. " Seena scena.
  - 8. ,. Phaëthusa magnirostris.
  - 9. , Sterna hirundinacea.

### PLATE XIV.

1.11		1.1	- 0	11.	
Fig.	١.	Lore	10	Sterna	nerers.

- 2. . saundersi.
- 3. . antillarum
- 4. .. longipennis.
- 5. ., albigena.
- 6. " frontalis.
- 7. " " maxima.
- 8. ., lunata.
- 9. " aleutica.

### PLATE XV.

- Fig. 1. Egg of Sterna superciliaris.
  - 2. " Procelsterna carulea.
  - 3. , Sterna melanauchen.
  - 4. ,, Rhynchops albicollis.
  - 5. ., Anous galapagensis.
  - 6. ", ", ridgwayi.
  - 7. " Sterna trudeani.
  - 8. " Rhynchops nigra.
  - 9. ,, ., melanura.

### PLATE XVI.

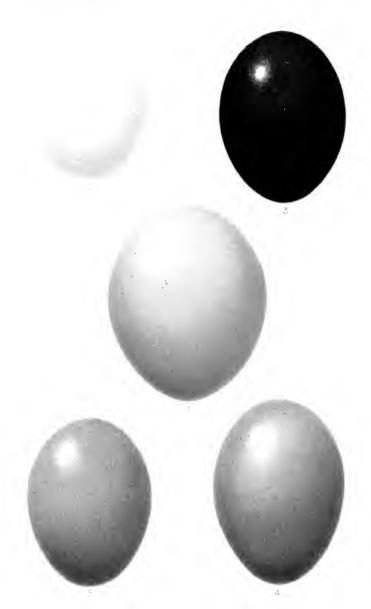
- Fig. 1. Egg of Larus maculipennis.
  - 2. " " glaucodes.
  - 3. , Creagrus furcatus.
  - 4. ., Larus hemprichi.
  - 5. ., ,, cirrhocephalus.

### PLATE XVII.

- Fig. 1. Egg of Larus brachyrhynchus.
  - " hartlaubi. 2.
  - " Rissa brevirostris. 3.
  - Larus crassirostris. 4.
  - ,, delawarensis. 5.

### PLATE XVIII.

- Fig. 1. Egg of Leucophaus scoresbyi.
  - ., Larus californicus. 2.
  - ., Xema sabinei. 3.
  - 4.
  - 5. ,. Megalestris antarctica.



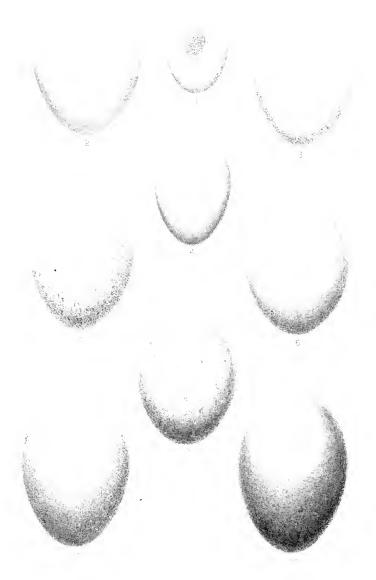
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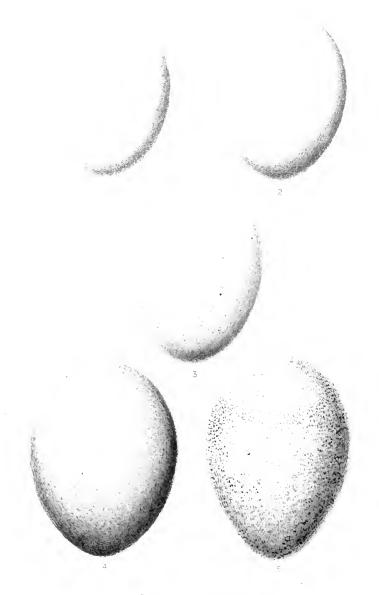
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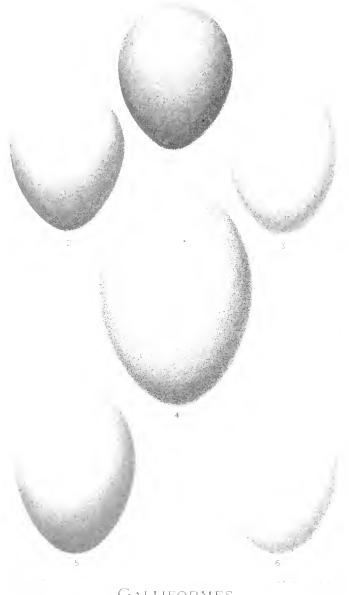
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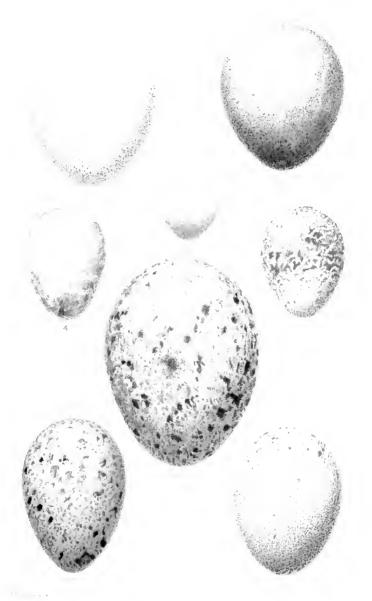
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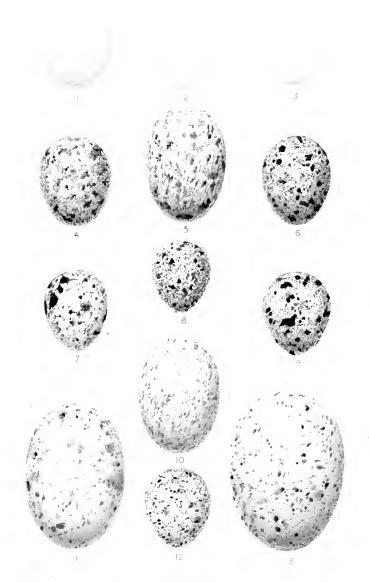
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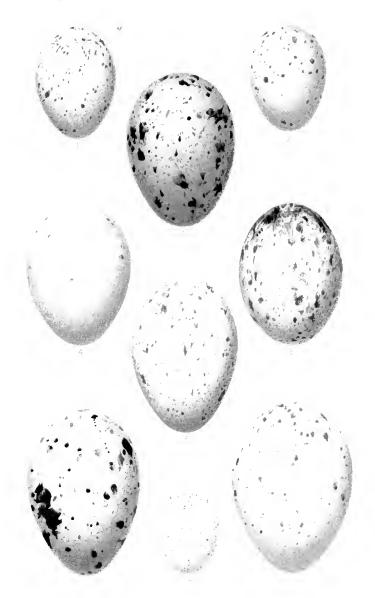
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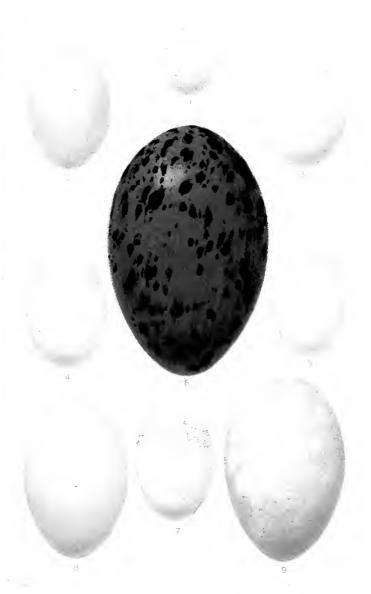
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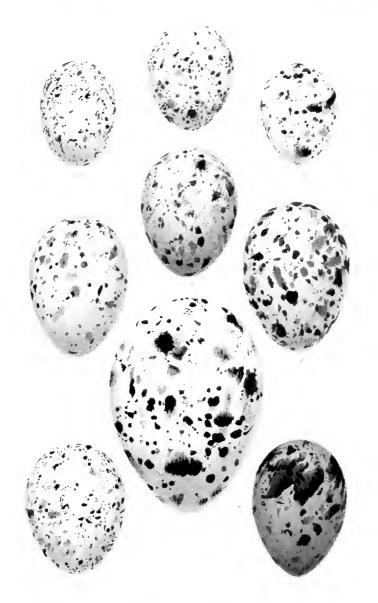
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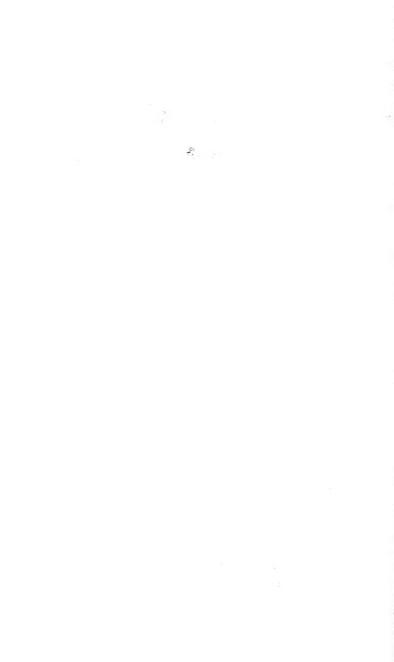


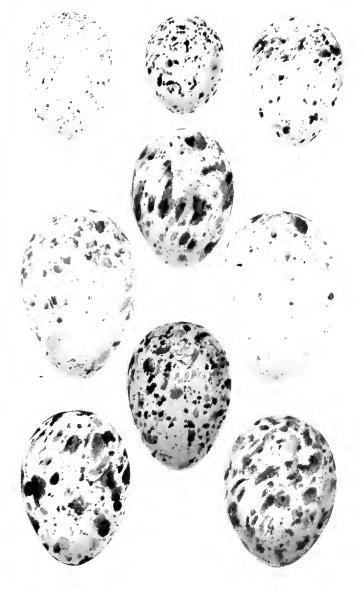
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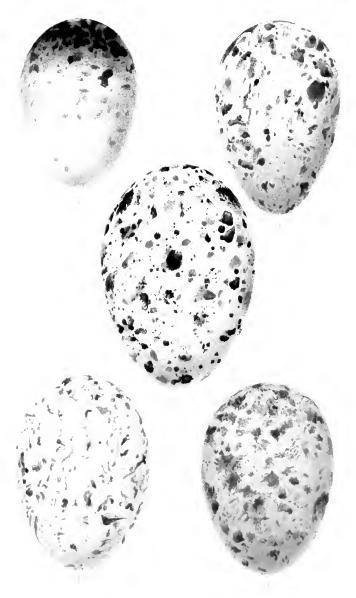
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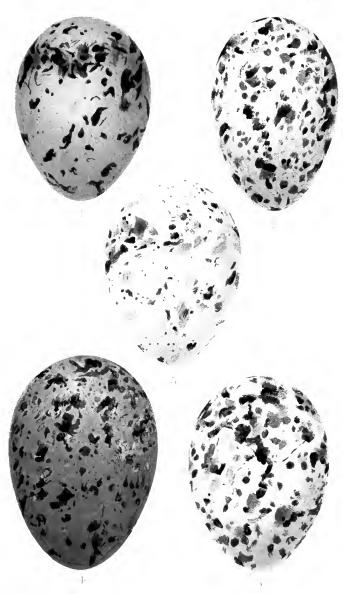
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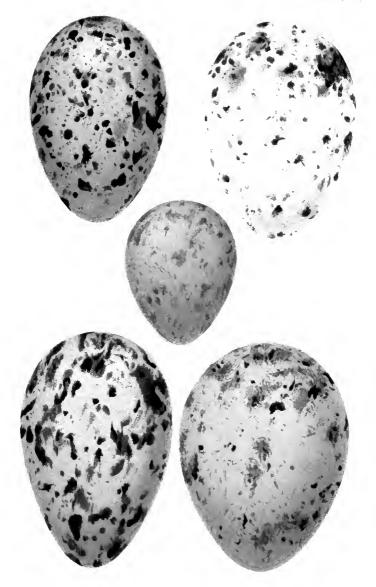
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